



• DELHI UNIVERSITY
LIBRARY

DELHI UNIVERSITY LIBRARY

Cl. No. MV4N39:7

Ac. No. 38223 5 DEC 1967 Date of release for loan

This book should be returned on or before the date last stamped below. An overdue charge of **5 Paise** will be collected for each day the book is kept overtime.

[illegible]

ECONOMIC WARFARE, 1939-1940

ECONOMIC WARFARE 1939-1940

BY
PAUL EINZIG

MACMILLAN AND CO., LIMITED
ST. MARTIN'S STREET, LONDON

1941

COPYRIGHT

**PRINTED IN GREAT BRITAIN
BY R. & R. CLARK, LIMITED, EDINBURGH**

P R E F A C E

AT the beginning of 1939 I published a book under the title of *Economic Problems of the Next War*. In October of the same year, a few weeks after the outbreak of the war, I revised it for a new edition ; owing to changed conditions I decided to change its title and called it *Economic Warfare*. Although it contained much entirely new material, and the old material was thoroughly revised, several reviewers reproached me for having published the same book under a new title, which, as one of them remarked, was not playing the game. To atone for my offence I herewith present an entirely new book under practically the same title as my previous book.

Apart from some historical references in the introductory chapter, no part of the material contained in *Economic Warfare* has been taken over in *Economic Warfare, 1939-1940*. While the previous book was to a large extent a misnomer — it dealt mainly with general economic problems of the war and had only two chapters dealing with economic warfare proper — this book is devoted entirely to a description of the methods of economic warfare in the broadest sense of the term. When the ordinary man talks about economic warfare he usually has in mind what I term *offensive* economic warfare. This is in accordance with the official use of the term ; the Ministry of Economic Warfare confines its activities entirely to offensive economic warfare. There is, however, also a defensive economic warfare consisting of the measures

taken to counteract the effects of the German-Italian offensive economic warfare upon British war economy, or, from the point of view of the Axis, of the measures taken by Germany and Italy to counteract the effects of British offensive economic warfare upon their war economies. In order to form a clear idea of the significance and scope of economic warfare, it is essential to deal with both offensive and defensive measures, even though the latter are to some extent indistinguishable from general measures of war economy.

My account of the early developments in British offensive economic warfare contains some outspoken criticism of the omissions of which the Government was guilty during the first eight months of the war. To criticise these omissions, and especially the efforts of the then Prime Minister and the then Minister of Economic Warfare to withhold from the nation the facts regarding the existence of wholesale leakages in the blockade, requires no apology. It is true that immediately after the change of Government in May 1940, the popular slogan was "no recriminations for the past". Doubtless at that time this attitude was wise. Political passions were still turbulent underneath the smooth surface of the national union created through the formation of a coalition Government under Mr. Churchill. It was perhaps expedient at that stage to avoid any criticism of the recent past which would have given rise to fresh disturbing controversies. Moreover, the British public, having been kept in a fool's paradise for eight months, had just received a rude shock and it was difficult to be certain how the revelations about the gross inadequacy of our war effort and the ineffectiveness of our economic warfare would affect the morale of the nation. In any case

the imminence of the danger of an invasion after the collapse of France made it necessary to concentrate upon the problems of the present and immediate future instead of indulging in recriminations for the past.

The considerations which towards the middle of 1940 would have rendered outspoken criticism inexpedient no longer prevail. The political parties have settled down to collaboration in the interest of victory and, even though their collaboration is far from perfect, it has become consolidated sufficiently to do away with the necessity for banning a critical examination of the recent past. The morale of the British public did not suffer unduly from the discovery that in the past the nation had been inadequately informed about the position and prospects. And while it is as important as ever to concentrate upon the future, it is now possible and even advisable to do so on the basis of the lessons of the past.

One of the points upon which I considered it necessary to lay stress for the first time in this book is the close interrelation between military and economic problems. In the past, economic warfare was regarded mainly in terms of naval blockade, and we have yet to grow accustomed to think of air raids as means for the execution of plans under offensive economic warfare. And very few people have thought of the anticipated German invasion attempts as means serving in part at least the purpose of German offensive economic warfare against this country. While most people are aware that economic action against the enemy tends to help our military action, few people are aware that the relations between economic and military action are reciprocal, since military action is also capable of assisting greatly our economic offensive.

Throughout the book I endeavoured to avoid both wishful thinking and defeatism. The former is by far the bigger danger in this country. For the century-old tradition by which the British never know when they are defeated provides adequate safeguard against defeatism, while it tends to generate complacency based on the assumption that whatever happens Great Britain is bound to win the last battle. It is of vital importance that the public should realise that it cannot implicitly rely upon this assumption, which has come to be regarded as axiomatic. Great Britain has not concluded an agreement with Providence by which final victory is secured in advance. The nation must realise that victory has to be deserved by hard work.

The disasters of May and June 1940 went a long way towards arousing the British nation from its complacency. Nevertheless, even now there is much left to be desired. It is true most people now work harder than a year ago, but not nearly hard enough. Sectional interests still continue to prevail over the supreme interests of national defence. As a result defensive economic warfare is still highly inadequate. Yet in face of the highly destructive German offensive economic warfare it would be necessary to strain every nerve to make good the destruction of supplies, means of production and means of transport by submarine attacks and air attacks. The outcome and the duration of the war will largely depend upon whether the necessity for a maximum of effort to that end will be realised by all interests in good time.

P. E.

CONTENTS

	PAGE
PREFACE	v
CHAPTER I	
OFFENSIVE AND DEFENSIVE ECONOMIC WARFARE	1
CHAPTER II	
THE NAVAL BLOCKADE	10
CHAPTER III	
LOOPHOLES IN THE BLOCKADE	19
CHAPTER IV	
BLOCKADE DURING THE BLITZKRIEG	29
CHAPTER V	
DIVERSION OF SUPPLIES FROM GERMANY	39
CHAPTER VI	
INADEQUATE PRE-EMPTION	47
CHAPTER VII	
OTHER WEAPONS OF ECONOMIC WARFARE	58
CHAPTER VIII	
AIR BOMBING IN THE SERVICE OF ECONOMIC WARFARE	66
CHAPTER IX	
EFFECTS OF THE BRITISH ECONOMIC OFFENSIVE	74

CHAPTER X

	PAGE
THE ECONOMIC OFFENSIVE AGAINST ITALY . . .	91

CHAPTER XI

THE GERMAN ATTEMPT AT BLOCKADING GREAT BRITAIN	97
--	----

CHAPTER XII

ECONOMIC EFFECTS OF THE GERMAN AIR OFFENSIVE .	105
--	-----

CHAPTER XIII

THE ECONOMIC DEFENSIVE	113
----------------------------------	-----

CHAPTER XIV

PRODUCTION DURING THE BLITZKRIEG . . .	122
--	-----

CHAPTER XV

FOREIGN TRADE IN THE BLITZKRIEG . . .	130
---------------------------------------	-----

CHAPTER XVI

FUTURE PROSPECTS	141
----------------------------	-----

CHAPTER I

OFFENSIVE AND DEFENSIVE ECONOMIC WARFARE

IT is a commonplace of current literature on the present war that the rôle of the economic factor in influencing the outcome of modern wars has increased considerably compared with the wars of earlier centuries. To a very large extent this is undoubtedly true. At the same time it is necessary to allow for the fact that in the more distant past the economic aspects of wars received much less attention than now and their significance was largely overlooked. It is only during recent years that the part played by economic organisation in the success of Wallenstein during the Thirty Years' War has come to be appreciated. Careful students of economic history would doubtless be able to trace down the full extent of the important part played by the economic factor in various major wars. It would be a task well worth undertaking.

Even allowing for the inadequate attention paid in the past to the part played by the economic factor in wars, however, it is true to say that the relative importance of that factor has increased in modern times. While in the Napoleonic wars the blockade did not play a decisive part, in the war of 1914-1918 it contributed to a very large degree to bring about the collapse of Germany. Had it not been for the inadequate supply of food and certain essential raw materials, Germany might have been able to hold out for years after 1918 — at any rate until the United

States had been able to send across the Atlantic a really substantial army.

In the present war, too, the economic factor plays a very important rôle. As things are at the time of writing, it appears as though a deadlock has been reached in the military situation. Germany succeeded in conquering the greater part of the Continent, but evidently she is unable to conquer Great Britain. This country, on the other hand, succeeded in bringing to a halt the onslaught of the Axis at the English Channel, and in defeating Italy in the Eastern Mediterranean, but it will be a long time before she will feel strong enough to attempt to deliver a decisive stroke against her opponent on the European continent. Meanwhile both opponents are endeavouring to improve their military position and to prepare the decisive stroke by means of strengthening their economic resources and weakening those of their opponent. Both of them hope that their task of delivering the fatal stroke on the battlefield will become greatly facilitated as a result of their success in the sphere of economic warfare. Optimists in both camps go so far as to hope that they would succeed in weakening economically their opponent to such an extent that resistance would collapse without any major military effort. Even though this view is obviously exaggerated, there can be no doubt that the economic factor will play a decisive rôle in breaking the present military deadlock.

The vital importance of the economic factor is realised not only by economists, politicians and administrators, but also by Generals, Admirals and Air Marshals. In past wars the military High Commands in the belligerent countries usually took full

charge, and the countries concerned were run to a very large extent in accordance with their instructions. In the present war the predominance of the economic factor is recognised by military leaders and, while insisting that the economic system should be run in accordance with military requirements, they agree at the same time to prepare their military plans largely in accordance with the requirements of economic warfare. The Navy is to a large extent an executive instrument of the Ministry of Economic Warfare in the enforcement of the blockade. The Air Force too acts largely upon suggestions coming from the Ministry of Economic Warfare concerning the choice of the objectives of air attacks in Axis countries. In past wars it would have been almost inconceivable that the High Commands should have allowed a civilian department to interfere with their plans. In the present war, however, they fully realise the decisive importance of weakening the enemy's resistance in the economic sphere. From this point of view Great Britain seems to be in a more favourable position than Germany. In this country High Commands were never allowed to play as important a part in non-military matters as in Germany. It is in accordance with the traditions of British Parliamentary democracy that the civilian Administration should have the last word. In Germany, on the other hand, the superiority of the military caste over the rest of the population is a deeply ingrained tradition and dies hard. This explains perhaps in part the fact that German air attacks, at the beginning of the Blitzkrieg at any rate, did not serve the purposes of economic warfare to anything like the extent British air attacks did from the very outset.

The growing importance of the economic factor in major wars is shown by a comparison between the three European wars of modern times — the Napoleonic wars, the war of 1914-1918 and the present war. On each occasion a major Continental Power, seeking to secure political supremacy over the Continent, found itself confronted by Great Britain. On each occasion the Power concerned, whether it was Napoleon's France or the Germany of the Kaiser or of Hitler, sought to break Great Britain's strength by means of a blockade, while Great Britain sought to break the strength of the Continental Power concerned by similar means. During the Napoleonic wars the results of the Continental blockade and of the British counter-measures were very far from decisive on either side. They caused considerable difficulties to both parties, but no historian can possibly claim that Napoleon came anywhere near the point at which his blockade began to threaten the existence of the British Empire. Nor did the British blockade contribute to any considerable extent to Napoleon's ultimate defeat. The reason for this was that the technical equipment of armies at the beginning of the nineteenth century was very modest in comparison with that of the armies of our days. The volume of raw materials that were vital for war purposes was incomparably smaller and most of it could be found locally. Nobody dreamt in those days that oil would ever play a major part in deciding the issue of a war. The metal requirements of the armies, which were much smaller than those of our days, were relatively insignificant. Moreover, the feeding of the comparatively sparse populations did not present the same problem as it does now. Even Great Britain with her

advanced industrialisation was able to cover by home production a very large proportion of her own food requirements. In such circumstances the blockade and counter-blockade could not possibly have played a decisive part. Admittedly, Great Britain was seriously inconvenienced by the decline of her Continental trade, while France and the countries controlled by her were seriously inconvenienced through the loss of their overseas trade. Nevertheless, the war was not and could not have been won or lost by either party as a result of this inconvenience.

By 1914 the state of affairs was totally different. The size of the armed forces which were facing each other was a multiple of the corresponding figures of the Napoleonic wars, and, as a result of the progress of military science, the equipment of the armies became much more extensive and much more diversified. Consequently the proportion of war requirements which had to be covered by means of imports increased materially. Although mechanisation was still in its infancy, oil became an important raw material for war purposes, especially as air warfare and the use of tanks assumed considerable dimensions during the more advanced phases of the war. Above all, the belligerents became vulnerable to the weapons of economic warfare as a result of the food situation. Neither Germany nor Great Britain was self-sufficient any longer. The maintenance of their food supplies largely depended upon imports. It is because of this reason that the British naval blockade proved itself to be of decisive importance to the outcome of the war. While the shortage of various metals also began to inconvenience Germany to no slight extent, it was the food shortage which undermined the resistance of her armies and of

her civilian population. And at one stage of the war in 1917 the shortage of food in Britain as a result of the success of the U-boat campaign very nearly turned the scales in favour of Germany. Obviously the economic factor was incomparably more important than it was a hundred years earlier.

The pace of developments became accentuated during the two decades that elapsed between the last war and the present war. During that comparatively brief period mechanisation made spectacular progress. The importance of the air arm increased to an unexpected degree. The requirements of the armed forces became much more diversified and increased in volume considerably. Consequently in 1939 both parties were much less self-sufficient in raw materials vital for war purposes than they were twenty-five years earlier. They were therefore much more vulnerable from the point of view of economic warfare than during the last war. Food production too declined, especially in Great Britain. Above all, oil assumed an absolutely vital rôle in the pursuit of the war. Indeed, if Prince Eugène of Savoy lived to-day, instead of claiming that the three major requirements of war are money, money and money, he would claim that they are oil, oil and still more oil.

To sum up the situation, the belligerent countries are to-day necessarily much less self-sufficient from the point of view of the requirements of the war than they were in 1914. Their military efficiency and the resistance of their civilian population depends to a much larger degree upon imported goods. At the same time the industrial organisation required for the production of munitions has increased materially and has become much more diversified.

It is only natural that both parties are anxious to take advantage of their opponent's vulnerability to the economic weapon. They aim at reducing the military efficiency of their opponent and breaking the resistance of the civilian population by means of offensive economic warfare. One of the major weapons in that offensive is blockade. This is the same as it was in the Napoleonic wars and in the war of 1914-1918, even though the detailed application of the weapon has undergone a considerable change since 1914, let alone since the Napoleonic wars.

Other weapons for the purposes of economic offensive include the use of black-lists for the reinforcement of the blockade. This weapon was used extensively during the last war. Similarly, preemptive purchases were carried out on a fairly substantial scale during the last war. Financial warfare too was pursued actively in 1914-1918 and to some extent even during the Napoleonic wars.

There is in addition a weapon which did not exist during the Napoleonic wars and was not applied to any noteworthy extent during the last war, and that is the systematic destruction of the opponent's supplies, productive capacity and means of transport through air attacks. During the last war the Allies confined their air attacks largely to the immediate vicinity of the battlefields. The Hinterland proper escaped such attacks almost completely. German air attacks on Great Britain were frequent but were almost entirely indiscriminate and their sole purpose was to weaken the morale of the civilian population. There was no sign of any systematic attempt at interfering with the supply and production of war materials. In the present war, on the other hand, this method of

economic warfare has assumed an importance equal to that of the blockade. Indeed it is possible to foresee developments as a result of which air attacks for the purpose of weakening the opponent's economic war potential would overshadow in importance the blockade weapon. After all, home production covers, both in Germany and in Great Britain, by far the larger part of vital war requirements and its extensive disorganisation would weaken the belligerent countries to a higher degree than the curtailment of their imports through blockade.

In everyday life when we talk about economic warfare we always have offensive economic warfare in mind. The Ministry of Economic Warfare was set up for the sole purpose of engaging in economic offensive on the lines broadly indicated above. Yet defensive economic warfare is fully as important as offensive economic warfare. Its aim is to safeguard the economic war potential of the country in face of the opponent's offensive economic warfare. Both parties seek to maintain their imports in spite of the blockade. In the case of Germany this endeavour assumes the form of blockade-running or circumvention of the blockade through neutral countries. In the case of Great Britain defence against blockade assumes largely the form of endeavours to increase shipping space, in addition to the military measures of organising convoys and otherwise providing for the defence of the merchant fleet. Both parties seek to safeguard their capacity to import also by means of securing foreign exchange. The efforts to maintain exports and to prevent a flight of capital constitute part of the defensive economic warfare.

Another group of measures of defensive economic

warfare includes measures taken for the purpose of increasing the self-sufficiency of belligerent countries in vital materials. To that end waste is sought to be avoided and materials available at home are sought to be utilised to a larger extent. Production, distribution and consumption is organised in such a way as to obtain the maximum increase in the output and the maximum economy in the use of vital materials, productive capacity and labour.

In a broader sense, even measures taken for the efficient financing of war may be considered as part of the defensive economic warfare, for in a given situation inadequate financing might gravely handicap the efficiency of war production.

Defensive economic warfare assumed particular importance as a result of the development of the Blitzkrieg. Until then its main task was to offset the effect of the blockade. Now, in addition to that difficult and important task, it also has to aim at offsetting the effects of destruction by air. The destructive effect of air warfare upon means of production, supplies and means of transport has given rise to an entirely new set of problems concerned with adapting production to the changes brought about from day to day by successful air attacks. To a large extent, therefore, this volume will be concerned with the economic aspects of the Blitzkrieg.

CHAPTER II

THE NAVAL BLOCKADE

FOR centuries past Great Britain's main source of strength in time of war was her naval supremacy, which secured for the side on which she was fighting the control of the seas. In every war in which Great Britain participated since the defeat of the Armada the enforcement of naval blockade was one of her chief contributions to victory. In particular during the war of 1914-1918 this weapon was used to its full extent, and with most satisfactory results. Nevertheless, it was necessary for the British nation to raise a huge Expeditionary Force and to fight a Continental war on an unprecedented scale. This fact is not adequately appreciated by many people who are inclined to believe that the naval blockade alone was responsible for Germany's collapse in 1918. They do not realise that, had it not been for the very effective support of the French armies by strong British armies, France would have been defeated and it would have taken many more years before the naval blockade had produced its desired effect.

Nevertheless, in 1939 it was the Government's official policy to seek to break Germany mainly by means of a naval blockade. The Government of Mr. Chamberlain had no intention of repeating the policy of 1914-1918, when economic warfare by means of the naval blockade was powerfully supplemented by sending overseas a large Expeditionary Force. As

it was subsequently admitted, that Government never intended to increase materially the size of the diminutive Expeditionary Force that crossed the Channel during the early months of this war. This in spite of the fact that, after the defeat of Poland, France had to face practically the full strength of the huge German army. It was widely believed in London, as well as in Paris, that thanks to the Maginot Line this task could be performed without difficulty, in spite of the crushing superiority of the German army in numbers and in equipment. British official circles and British opinion came strongly under the influence of the military theories of Captain Liddell Hart, whose main thesis was that defensive had overwhelming advantages over offensive and that an army on the defensive is in a position to contain attackers who outnumber it three times. Consequently it was not considered necessary in London to make an effort to raise an Expeditionary Force running into millions in order to make good the French army's deficiency in numbers. The view was held that British man-power would be better employed in the common cause if it largely confined itself to the production of munitions, and that Great Britain's main share in the common effort should be the enforcement of a watertight naval blockade.

In the light of subsequent events everybody has now realised how utterly mistaken this policy was. Bitter experience has proved that in a war the advantages are not on the side of the party which remains on the defensive, but on that of the party which takes the initiative in attacking at the spot and at the time chosen by himself. The French and British armies were vastly outnumbered by the German armies and their resistance was broken within

a few weeks. In the light of this experience it now sounds pathetically comic when we recall the stock phrase of wishful thinkers in the autumn of 1939, who repeated to boredom, "We shall win the war by abstaining from attacking Germany".

The question is, however, would the official British policy have proved correct if the Maginot Line had not been broken through and if the deadlock had continued on the Western Front? Would economic warfare, consisting mainly of naval blockade, have been sufficient to secure victory for the Allies? In many ways the chances of enforcing an effective blockade were more favourable than in 1914. The superiority of British and French naval forces over German naval forces was more pronounced than during the last war, so there was a better chance to enforce effective contraband control in European waters. The co-operation of the Fleet Air Arm and of the Coastal Command Aircraft in the patrolling of the seas further improved the chances of preventing any blockade-running. On the other hand, there were considerations for which the chances of the blockade appeared to be less favourable. In 1939 Germany was less isolated on the Continent than in 1914-1918 when she was faced by a hostile Russia, Italy, Serbia and Rumania. During that war the only European countries with which Germany was able to trade were the Scandinavian countries, Holland and Switzerland. In 1939, on the other hand, she was in a position to trade with the entire Continent with the exception of the countries west of the Maginot Line. This being so the naval blockade affected a smaller percentage of her foreign trade than during the last war. This was an additional reason, however, for the Allies to do

their utmost to enforce the naval blockade within its comparatively limited scope.

Immediately upon the outbreak of the war contraband control was established by the Royal Navy, effectively assisted by the French naval forces. The Allied patrol vessels of every kind intercepted every ship approaching Continental ports. During the early weeks a large number of German-owned ships caught on the high seas were seized. An even larger number of neutral ships carrying German-owned cargoes or cargoes for German destinations were intercepted and their cargoes sold as a result of rulings by Prize Courts. The immediate fruit of the naval blockade was the seizure of considerable quantities of goods on their way to Germany. At the same time as weakening Germany's economic potential, the blockade thus strengthened that of the Allies to a corresponding extent.

In many instances the Allied naval forces were unable, however, to take possession of the German cargoes. Threatened by seizure by the Allied forces, many German ships scuttled themselves or sought refuge in neutral ports. This meant that while Germany's economic war potential was reduced by the ships and cargoes which were at the bottom of the sea or which lay idle in neutral ports, the economic war potential of the Allies did not benefit. During subsequent months many of the German ships sheltering in neutral harbours made attempts to reach Germany or some Continental port through which their cargo could be despatched to Germany. It was reckoned in Berlin that even if one ship out of three or four was successful it was worth while to sacrifice the others, which would in any case remain inaccessible

to Germany for the duration of the war.

While the Navy, and to some extent the Air Force, acted as the executing hand in the enforcement of the blockade, its administration was in the hands of the Ministry of Economic Warfare. During the last war the corresponding department was called the Ministry of Blockade. The reason why in the present war the Department concerned with the blockade was named the Ministry of Economic Warfare is that, in addition to the blockade, it was called upon to perform many other useful functions, as we shall see in later chapters. It was in the Ministry of Economic Warfare that the measures of the blockade were elaborated and the Navy and Air Force acted upon that Ministry's advice in enforcing contraband control.

The Ministry of Economic Warfare sent representatives to neutral countries in order to supervise the movements of goods and to inform the Ministry about shipments which are likely to be intended to reach Germany. The Intelligence Service of the Ministry of Economic Warfare worked in close collaboration with the Naval Intelligence Service, which, while primarily concerned with military matters, was bound to come across much economic information of importance. Unfortunately it was impossible to obtain similar assistance from the Military Intelligence owing to established traditions by which the War Office solemnly undertakes that information obtained by its secret agents would not be used outside that Department. As a result of the unwillingness of the War Office to break with this tradition, much of the valuable economic information that was bound to be collected by agents of Military Intelligence was wasted. Even so, generally speaking, the Ministry of Economic

Warfare and the Admiralty were well informed about attempts to evade the contraband control, and the task of the Navy was greatly facilitated by the fact that the naval authorities were usually advised when a ship was expected to contain contraband goods.

Hitherto we have been dealing exclusively with the Allied control of German imports. From November 1939 onwards, however, the blockade was extended also over German exports. It may appear astonishing that several months were allowed to elapse after the outbreak of the war before this very obvious measure was taken. In this respect history repeated itself, for during the last war it was not until 1915 that the blockade was extended over German exports. The reason for this delay in both wars was that, according to the established principles of International Law, only incoming goods can be regarded as contraband. Since, however, Germany violated many rules of International Law there was no reason why the Allies should not have applied the law of reprisals from the very outset. In the present war the sinking of the *Athenia*, an out-going passenger steamer, at the beginning of September 1939, would have justified the immediate application of the blockade against out-going German goods. Nevertheless, the Government considered it advisable to wait until Germany made herself guilty of an even more flagrant breach of international law by resorting to her magnetic mine-laying warfare.

One of the reasons for the delay in the application of the blockade on German exports was inadequate realisation of the importance of that measure. Many people, including some in official positions, were inclined to hold the view that it is of no importance

if Germany is allowed to export, since contraband control prevents her from benefiting by the proceeds of her exports in the form of goods purchases abroad. Even if this assumption had been correct, it would have been necessary to take measures to prevent Germany from exporting, since the possession of large foreign exchange assets was helpful to her in many ways, apart from enabling her to import essential materials. The money obtained through exports could be used for propaganda, espionage, subversive activities against neutral Governments friendly to the Allies, or pre-emptive purchases of essential materials with limited supplies. In reality it was possible for Germany to benefit by the proceeds of her exports in the form of increased imports, notwithstanding the strict contraband control. As we shall see in Chapter III, it was possible for her to import owing to the existence of many loopholes in the blockade. Apart from this, she was in a position to transfer the foreign exchange proceeds of her exports to some Continental country in return for an increase of her imports from that country. The absence of control over German exports tended partly to nullify, therefore, the results of import control.

Fortunately this came to be realised by the Government at a comparatively early phase of the war. Pressure by the Minister of Economic Warfare, Mr. Ronald Cross, and by the Secretary of the Department of Overseas Trade, Mr. R. S. Hudson, and also by politicians who at that time held no official position, such as Mr. L. S. Amery, Mr. Harold Macmillan and Mr. Robert Boothby, induced the War Cabinet to overrule the opposition of the Foreign Office which was at that time over-anxious to avoid irritating

neutrals by extending the blockade over German exports. The public indignation over unlimited submarine and mine-laying warfare provided the last straw and induced the Government to pass the Reprisals Order, establishing an embargo over the export of goods which were of German origin or ownership.

During the months that followed December 1939, the Ministry of Economic Warfare concluded a series of war trade agreements with neutral countries. The object of these agreements was to obtain the voluntary limitation of the export and re-export of essential materials by these countries to Germany. The rule was adopted that the details of these agreements were not disclosed in order that the countries concerned should not be embarrassed in their relations with Germany. As we shall see in Chapter III, these war trade agreements provided important loopholes through which neutral countries were enabled to import certain quantities of goods for the purpose of re-exporting them to Germany.

A much more effective way of dealing with the problem of import control was the inauguration of a system of licences which became known under the name of "navicerts". In order to obviate the necessity for neutral ships to call at one of the ports of control and suffer delay and inconvenience through the examination of their cargoes, they were given the opportunity of obtaining navicerts from the British representatives at the ports of embarkation. In possession of navicerts covering the entire cargo, they were able to proceed unhampered. Whenever the Ministry of Economic Warfare came to the conclusion that stocks of certain essential materials held

by Continental neutral countries were in excess of reasonable requirements, the issue of navicerts for further shipments of such materials to the countries concerned was suspended. The best known example of such action was the suspension of navicerts for the shipment of lubricating oils at the beginning of 1940 to several countries contiguous to Germany.

Nevertheless, it is true to say that restrictions on imports by neutral countries were the exception rather than the rule. Even as late as in April 1940 Mr. Ronald Cross stated in reply to criticisms on that point that, if he were to adopt such restrictions, he would provide justification for the name given to him by the German radio — that of Minister of Piratical Warfare. Not very long after this statement the Government decided to intensify control over imports by neutrals, but by that time Mr. Ronald Cross was succeeded in his office by Dr. Hugh Dalton.

CHAPTER III

LOOPHOLES IN THE BLOCKADE

DURING the first few months after the outbreak of the war it was generally assumed that the blockade was as good as watertight. This was actually stated on repeated occasions by official spokesmen, including Mr. Ronald Cross, Minister of Economic Warfare, and Mr. Chamberlain himself. The public had no reason to doubt that the official statements were in accordance with the facts, and information to the contrary was, at the beginning at any rate, very scarce. The Government was doing its utmost to encourage the feeling of optimism about the effectiveness of the blockade, for it appeared to provide justification for its policy of inaction in other spheres. Month after month nothing was done on any of the battle-fronts and from time to time the public was beginning to grow restive, wondering how this war can ever end if both parties simply sit on both sides of the lines of defence. From time to time busybody M.P.s were inclined to pester the Government about the inadequacy of its economic war effort and the slow progress of rearmament. It was obvious to everybody that the increase of Great Britain's arms strength was proceeding at a snail-like pace. Unemployment remained well over a million in spite of the calling-up of various year classes. Working hours remained short, and week-end and bank holiday arrangements remained unaffected by the war. A large number of firms, able and willing to

take a hand in the rearmament effort, failed to obtain contracts which were reserved for the "inner circle". Those in charge of various departments, from Ministers downward, would not have dreamt of allowing anything to interfere with their Saturday golf.

The easy-going and comfort-loving British nation was not yet aroused by the realisation of the vital need for a more vigorous effort. The absence of imminent danger was by no means the only reason for its indifference towards the Government's slackness. One of the main reasons why, apart from a few exceptions, M.P.s did not press vigorously for an intensified war effort, and why the public did not go beyond the stage of grumbling, was the Government's deliberate effort to disseminate optimism about the progress of economic warfare in general and of the blockade in particular. Official statements conveyed the impression that, as a result of the blockade, Germany was gradually being drained of her economic war potential, and that even in the absence of major battles she would sooner or later be forced to surrender.

The truth of the matter was that the blockade was leaking like a sieve. Indeed, it may be stated without much exaggeration that during the first eight months of the war Germany was able to import everything she was able to pay for, the only practical result of the blockade being that a relatively small percentage of her consignments were seized by the Allied contraband control, and that the necessity of importing through devious routes or through the intermediary of middlemen increased the cost of the imports.

In spite of Mr. Cross's repeated assurance that the leakage through the blockade merely amounted to a trickle and in spite of Mr. Chamberlain's sweeping

statement that Germany's sea-borne trade had been strangled, the public became gradually aware of the existence of some very important loopholes. In answering to questions in Parliament, Mr. Cross disclaimed knowledge of them or minimised their significance. Nevertheless, subsequently, many important leaks were admitted by the Government, or their existence became authentically confirmed in some other ways.

The following were the main leaks in the blockade during the first eight months of the war :

- (1) Shipments through Vladivostok.
- (2) Blockade-running, mainly through the Norwegian territorial waters.
- (3) Evasion through the intermediary of neutral firms lending their names to German transactions.
- (4) Re-sale of essential materials by neutral countries under German pressure.
- (5) Exemptions from the blockade through diplomatic concessions.

From the first day of the war the Trans-Siberian Railway provided one of the most important lifelines through which Germany remained in uninterrupted connection with overseas continents. Goods were pouring in through Vladivostok and Harbin, and the extent of this traffic was only limited by the limitations of the capacity of the Trans-Siberian Railway, and by the vital requirements of Soviet Russia which took precedence over German consignments. Although a large oil-producer herself, Soviet Russia became an importer of oil after the outbreak of the war, according to export statistics of the United States, Mexico and other Latin American countries. What is even

stranger, tin and rubber imported from the Malay States by the United States was re-exported to Vladivostok, thereby almost completing a tour round the world. When the United States Government sought to discourage this somewhat unnatural traffic there was a spectacular increase of shipments of various essential raw materials from the Dutch East Indies to Vladivostok.

The difficulty in dealing with this situation was that the enforcement of contraband control, even if practicable from a naval point of view, would have antagonised three neutral Great Powers, the Soviet Union, Japan and the United States. In any case even at that time, when the combined Anglo-French naval forces enjoyed an immense superiority over Germany's naval power, it would have been difficult to spare the forces required for the effective control of shipping across the Pacific. There would always have been the risk of becoming embroiled in a war with Japan, as Japanese official and public opinion was very touchy about any interference with sea-borne traffic between Japan and the Asiatic mainland. Nevertheless, during the spring of 1940 the Allies decided to take action and seized two Soviet steamers. This action was not followed up, however, and after some months of captivity the two steamers and their cargoes were restored to Soviet Russia. There is no reason to suppose that the seizure of the two ships made much difference to the continuous flow of contraband goods via Vladivostok. It is difficult to see how the Allies could have stopped this loophole; but the difficulty of stopping it was no justification for minimising its significance.

In European waters and in the Atlantic the naval

blockade was enforced efficiently. Nevertheless, it was impossible to prevent blockade-running, especially during the long winter nights when effective patrolling of the Atlantic and the North Sea was extremely difficult. The practice usually followed by German ships or by ships carrying German cargo was to keep to the north and reach somehow Norwegian territorial waters. Once there they could always sneak along the fjords and reach German ports. The case of the *Altmark*, the German supply vessel which carried British prisoners captured by the *Admiral Graf Spee*, drew attention to this loophole. Some weeks later, under the pressure of Parliamentary opinion, the Government decided to take firm action to stop this traffic by laying mines in Norwegian territorial waters.

Evasion through the intermediary of neutral firms was a very widespread practice during the first eight months of the war. It is true the British authorities were doing their utmost to make it more difficult by putting on the black-list the names of those engaged in this traffic. Nevertheless, it was always possible for the Germans to find new intermediaries or for the old intermediaries to find new names. In some instances (for example, in the case of Count Volpi, who was engaged in aiding Germany to evade the blockade on a gigantic scale) it was considered politically inexpedient to take action.

New sets of business men sprang up in European neutral countries, especially in Amsterdam, Rotterdam, Antwerp, Genoa and Trieste. They experienced a brief but glamorous period of unprecedented prosperity. They were actively engaged in the circumvention of the blockade in both ways. They acted as intermediaries for the sale of German manufactures

and for the purchase of overseas raw materials for Germany. As a result of this traffic goods were pouring in and out of Germany, especially through the Low Countries and Italy, but to a less extent also through the Scandinavian countries and even through Switzerland.

In many instances the import of raw materials on neutral account was genuine. Subsequently the owners of the stocks imported (who were not necessarily identical with the importers) yielded to the temptation of re-selling their goods to Germany at a big profit. In other instances the German Government was successful in inducing the neutral Governments by means of pressure to re-sell some of the stocks imported.

The ease with which neutral countries were allowed to accumulate large stocks of essential raw materials was largely responsible for the evasion of the blockade through these channels. Month after month the Government was urged to take a firm line with the neutrals and ration their raw material imports on the basis of their pre-war requirements. Generally speaking the Government refused, however, to comply with this demand. The argument used was that since Great Britain was engaged in this war for the defence of the freedom of small nations, it would be inconsistent to limit the freedom of those nations to import goods for their own requirements. This argument was utterly unconvincing. With the same justification it would be possible to argue against compulsory black-out regulations. After all, this war is fought for the sake of individual freedom and compulsory black-out means a drastic limitation of that freedom. If in the sacred name of freedom neutrals are given opportunities to

re-sell essential materials to Germany, it would be consistent to allow easy-going citizens to assist German raiders by showing as much light as they choose to. As a matter of fact it is essential, in the interest of safeguarding the ultimate freedom of individuals and countries, to impose certain limitations upon their freedom for the duration of the war.

From the point of view of the neutral countries themselves the policy pursued was short-sighted. By making it easier for them to re-sell essential raw materials to Germany they were given an opportunity to strengthen the power which menaced their freedom and to increase the difficulties of the Powers which were engaged in defending it. What is more, the accumulation of huge stocks of oil and other materials in neutral countries within striking distance of the German mechanised columns provided a strong temptation for Germany to violate their neutrality.

In the case of Italy the leniency with which the blockade was applied was due to a policy aiming at keeping her out of the war. It was hoped in London and Paris that so long as Italy was allowed to increase her raw material stocks, and even to import for re-export to Germany, she would remain neutral. Moreover, Germany would find it more useful if Italy remained neutral to serve as a channel for her exports and imports to and from overseas countries, rather than take an active hand in the war. In reality, during 1939 and the early months of 1940, it would have been perfectly safe for the Allies to impose a water-tight blockade on Italy. It was not until the collapse of France that she decided to intervene, and a relaxation of the blockade decided upon in the eleventh hour in order to tempt her to remain neutral made no differ-

ence to her decision. Indeed, had Italy been prevented during the first nine months of the war from accumulating large surplus stocks of essential raw materials, she might have hesitated to embark upon war against the Allies so long as she was not quite sure that Great Britain as well as France would soon give up resistance.

The case of German coal shipments to Italy provides a characteristic instance of the loopholes in the blockade and also of the Government's attitude towards these loopholes. Although the Order in Council providing for the extension of the blockade over German exports became operative in November 1939, an agreement was reached with Italy by which German coal shipments were allowed to proceed to Italian ports without interference. Many shiploads of German coal passed through the English Channel under the very nose of British patrol vessels. The coal which was allowed to be shipped from Germany to Italy amounted to millions of tons. Notwithstanding this gigantic leak, the Government claimed the blockade to be practically water-tight. It was not until he was cross-questioned by M.P.s that the Minister of Economic Warfare admitted this loophole. Under the pressure of Parliamentary opinion he took belated action in February to stop it and even to seize some cargoes. These cargoes were subsequently released, but further shipments of German coal to Italy were stopped. As a result it became necessary for Germany to burden her already overburdened railway system by sending coal to Italy by rail.

There were leakages in the blockade also as a result of concessions made to the United States. During the early phases of the war the Washington Administra-

tion was compelled by Isolationist opinion on various occasions to protest against British blockade measures. Early in 1940 an agreement was negotiated by which certain German exports were allowed to proceed to the United States. It included goods which were bought before the extension of the blockade over German exports and certain optical instruments and other similar lines. The rule that goods bought before the extension of the blockade over German exports are allowed to proceed to their destination was of course widely abused, and on many occasions the British authorities considered it diplomatic to shut their eyes to these abuses.

It is beyond doubt that Mr. Cross was pressing for a more effective application of the blockade. Since, however, he was unable to induce the War Cabinet to accept his point of view, he became a whole-hearted supporter of the policy of his senior Ministers. While it would have been too much to expect him to be disloyal to the official policy, the extent to which he sought to convey the impression that all was going well was certainly uncalled for. His statements in the House about the progress of economic warfare presented an extremely optimistic picture of a Germany that was rapidly becoming crippled by shortages in essential raw materials. It was these statements that earned his Department the name of the Ministry of Wishful Thinking. His answers to questions by M.P.s about loopholes in the blockade were masterpieces of Parliamentary evasion, and only the most persistent supplementary questions were able to nail him down to the admission of some unpalatable facts. Throughout March and April 1940 he was subjected to a barrage of questions about the loopholes in the

blockade. A large and increasing number of Members of both sides of the House took an increasingly active interest in the subject, and headlines about the loopholes in the blockade began to gain prominence in the popular Press. The pressure increased when in March Mr. Churchill, then First Lord of the Admiralty, admitted that as far as the Navy was concerned the blockade could be made much more effective without any additional efforts, but that for diplomatic considerations this was not done. This admission was in flagrant contradiction with the statements of Mr. Chamberlain and Mr. Cross on the subject. Evidently a storm was brewing in Parliament and, had it not been for the momentous developments in Norway in April 1940, and for the change of Government in the following month, the growing discontent about the Government's attitude towards the loopholes in the blockade might easily have developed into a major crisis. The discovery that the House and the country was misled about the effectiveness of the blockade might have played the same vital part as the bursting of the munition scandal played in 1915 when it became the cause of the replacement of the weak Asquith Government by the vigorous Lloyd George Government.

CHAPTER IV

BLOCKADE DURING THE BLITZKRIEG

THE German conquest of Denmark, Norway, Holland, Belgium and France during the spring of 1940 created an entirely new situation from the point of view of economic warfare in general and the blockade in particular. It affected the blockade in many ways, in its naval aspects, diplomatic aspects and economic aspects.

From a naval point of view it would be idle to deny that the position changed considerably to Germany's advantage. Germany gained control of a 2000-mile coastline from the Arctic to the Bay of Biscay. This in itself made contraband control much more difficult. At the same time Great Britain lost the collaboration of the French Navy, which during the early phases of the war played a very useful part, especially in the Mediterranean and the South-Eastern Atlantic. Moreover, as a result of Italy's entry into the war, a considerable part of the British naval forces was tied down in the Mediterranean. The increase of the submarine menace and the interruption of the Mediterranean trade route resulted in an increase of convoy requirements for which the Royal Navy had to provide. Last but by no means least, the constant threat of a German invasion necessitated naval arrangements for home defence. Against this there were only minor advantages on the other side of the balance-sheet, such as the acquisition of naval bases in Iceland and the Faroe Islands.

It is no wonder that the first impression of friend and foe was that the Royal Navy would become unequal to its gigantic task. The Germans were boasting freely that the North Sea had become a German lake and that it was now Germany's turn to blockade instead of being blockaded. They were so cocksure of either destroying the British resistance or at least overcoming the British naval blockade that German exporters were officially encouraged to make firm offers to Latin American importers guaranteeing delivery during the autumn months. In Great Britain itself there was a widespread feeling that it was no longer feasible to maintain the blockade, and it was suggested in Parliament and in the Press that the Ministry of Economic Warfare might as well close its doors. This defeatism was largely the result of the disappointment that followed months of wishful thinking, encouraged by the Government's optimistic statements about the effectiveness of the blockade and economic warfare. Having been led into the false belief that economic warfare was capable of achieving everything, a large section of the public and of political opinion now fell into the other extreme, by coming to the conclusion that economic warfare could no longer serve any useful purpose.

In reality the Royal Navy proved itself fully capable of upholding contraband control in the Atlantic and in the North Sea. What is more, it established a very effective contraband control against Italy in the Mediterranean. Even though the number of naval units available for that purpose became materially reduced, the task continued to be performed with great efficiency. Admittedly it was impossible to prevent some German ships reaching the Norwegian

coast, but from this point of view the situation was if anything better than before, since the use of the naval bases in Iceland and the Faroe Islands greatly facilitated the control of the Northern Atlantic. Even though the Germans claimed the North Sea to be a German lake, they took good care that their ships did not as a rule sail very far from the eastern coastline of that lake.

Beyond doubt Germany remained subject to the naval blockade, in spite of the results of the Blitzkrieg of May and June 1940. The German exporters who during the summer of 1940 undertook to deliver goods in Latin America at fixed dates in the autumn of the same year, were unable to carry out their pledge. In order to fulfil their contract they bought American manufactures and even British goods available in the United States or in Latin America, and delivered them instead of the German goods sold. Alternatively, they paid the Latin American importers a substantial compensation for non-delivery, as provided for in their contracts. The experience was as useful from a British point of view as it was harmful from a German point of view. The liquidation of the contracts entered into in a boastful spirit of over-confidence cost Germany a substantial amount in dollars and other foreign currencies. The Latin American merchants learned a lesson and henceforth they were inclined to distrust German promises.

From a diplomatic point of view the blockade situation changed decidedly in favour of Great Britain. The question whether or not small Continental neutral countries should be allowed to maintain their imports no longer existed. Germany was unable to import any more essential materials through the intermediary

of the Scandinavian countries and the Low Countries, which until the spring of 1940 had provided very useful channels for blockade evasion. Above all, Germany was unable to make use of the services of Italy as the principal intermediary for her imports and exports. During the first nine months of the war Italy rendered very useful services to Germany in her rôle of commercial intermediary. As subsequent events have proved, her services as an active ally did not by any means compensate Germany for the loss of her services as a commercial intermediary. Beyond doubt, from December 1940 onwards Berlin had good reason to wish Italy had remained neutral.

On the other hand, from a diplomatic point of view the establishment of a direct frontier between German-occupied France and Spain improved Germany's position in face of the naval blockade. It became possible to import through the intermediary of Spain and Portugal. The British Government was reluctant to apply a blockade too strictly against Spain, for fear that this would drive the Franco Government definitely into Hitler's arms. As it was vitally important to keep the Western Mediterranean open, it preferred to shut its eyes to a fairly substantial amount of blockade evasion through Spain, rather than risk an attack on Gibraltar. In particular, Spanish oil imports increased considerably during the autumn of 1940, until the United States decided to limit her oil exports to Spain. In many ways Spain played the same part as Italy did before her entry into the war, though on an incomparably smaller scale. Gradually the blockade was made tighter and, in any case, early sales to Germany depleted Spain's own supplies of foodstuffs and other materials to such an extent that General

Franco considered it advisable to limit further re-exports to Germany. Even so there was a widespread feeling that the Government erred on the side of excessive generosity in its attitude towards the application of the blockade against Spain.

As far as Soviet Russia is concerned the blockade situation remained substantially unchanged. Goods continued to pour in and out of Germany through the Trans-Siberian Railway. Negotiations in Moscow by Sir Stafford Cripps made no material progress. Indeed the concession made to the Soviet Union regarding Russian imports through the Persian Gulf increased the capacity of the Trans-Siberian Railway to carry German goods, in that it resulted in the diversion of part of Soviet Russia's own imports and exports from that line.

Switzerland provided another diplomatic loophole in the blockade. After the defeat of France she was entirely surrounded by German-occupied or German-controlled territory. After prolonged negotiations the Ministry of Economic Warfare agreed to authorise the import of certain quantities of essential materials carried by ships chartered by the Swiss Government through the ports of Marseilles or Genoa. The agreement contained a clause according to which it would become null and void if and when Switzerland came under Axis control. There is, of course, no tangible guarantee that part of the materials imported is not re-exported to Germany, or even that it is not retained by Italy or by Vichy-controlled France. It is felt in official circles in London, however, that it is worth while to take this risk, for if Switzerland is entirely deprived of her chances to import essential materials she may feel compelled to surrender to Hitler. In

any case the quantities involved are not unduly large. The British Government now takes good care not to repeat its former error of allowing small neutral countries to build up excessive raw material reserves.

From an economic point of view the blockade situation changed considerably for the worse owing to the acquisition by Germany of control over important new sources of raw materials on the Continent. After the conquest of Luxembourg and Lorraine the problem of iron ore supply ceased to exist for Germany, especially since as a result of the conquest of Norway she acquired virtual control also over the Swedish iron ore supply. The establishment of a direct frontier with Spain secured for Germany an important source of copper and other metals. In any case the conqueror found huge stocks of metals, petrol, lubricating oils and other essential materials in the conquered countries. The weak policy pursued by the Foreign Office in allowing neutral countries to build up large stocks was bearing its fruits. When, following upon the German victories in Western Europe, Rumania surrendered to Axis influence, this resulted in an increase of Germany's potential oil imports by land, even though the problem of transport remained to be solved.

On the other hand, from the point of view of food supplies the German-controlled territory of Europe was if anything less self-sufficient than Germany itself was before her various conquests. It became more important than before to be able to import food from overseas. Germany promptly seized all the accumulated food stocks of the conquered countries, whose own food production was not sufficient to meet their

own requirements. In any case they had to provide for the requirements of the large German occupation armies out of their current food production.

The conquest of Western Europe was barely completed when the German propaganda machine was set in motion to work up a campaign in the United States and in Latin America in favour of insisting upon shipping food to the conquered countries. The coming famine in Europe was painted in the gloomiest possible colours and Great Britain was accused of trying to exterminate the conquered peoples by enforcing a rigid blockade against them. This agitation was not entirely without response. In the United States ex-President Hoover, who after the last war played an active part in feeding the half-starved populations of various European countries, launched out a campaign demanding that the British blockade authorities should be prevailed upon to allow food ships to pass through the contraband control. A number of American business men concerned with export trade suddenly discovered a strong feeling of sympathy and commiseration towards "the unfortunate victims of the British blockade". German propaganda met with a similar response in the Latin American countries, which were becoming increasingly concerned about the loss of their European markets.

In Great Britain itself there was a small but by no means uninfluential section of official opinion and public opinion which was in favour of weakening the blockade for the sake of avoiding famine in German-occupied countries. Against this the Ministry of Economic Warfare under its new chief, Dr. Hugh Dalton, adopted the attitude that it is Germany's responsibility to feed the countries which she con-

quered and whose food reserves she acquired for herself.

There was every reason to believe that the food supplies controlled by Germany, together with the current production of German-controlled territories and the imports from South-Eastern Europe and Russia, were ample to cover the requirements of German-controlled Europe. For obvious reasons, however, Germany would have preferred to keep for herself the looted food supplies and feed the conquered peoples with the aid of supplies imported for that purpose from overseas. Indeed there was not the slightest safeguard against the imported food supplies being also seized by Germany. The answer to the argument that from a humane point of view the blockade should be relaxed in favour of food imports to conquered countries was that most people in the oppressed countries would be prepared to put up with hardships, if in doing so they would facilitate the task of their liberation. According to reliable information, the Dutch population actually welcomed the R.A.F. bombers in spite of the risk to their life and property through their activities, and there is no reason to suppose that their attitude and that of other conquered peoples would be any different regarding the fight against Germany by means of the blockade. In any case the view was held in London that Germany could ill afford to allow actual famine to develop in conquered countries, for hunger might lead to riots and revolts, and the development of epidemics might affect the German occupation armies.

There was a hard fight behind the scenes before a decision was taken what attitude to adopt towards the demand for a relaxation of the blockade. Had

Mr. Ronald Cross been still in charge of the Ministry of Economic Warfare there can be little doubt that he would have given way to the Foreign Office, which was in favour of making concessions. Dr. Dalton was, however, made of a tougher fibre, and thanks to his firm attitude the War Cabinet eventually decided to reject the claim for the relaxation of the blockade. At the same time it was also decided to apply the blockade in full over unoccupied France and the North African French possessions controlled by the Vichy Government.

In August 1940 arrangements were made to increase the efficiency of the navicert system. The use of navicerts was made compulsory and in addition the system of ships' warrants was adopted. Ships whose cargoes were covered by navicerts obtained ships' warrants which obviated the necessity of search by contraband control authorities. Ships without ships' warrants were refused British port facilities and credit facilities. The system operated successfully and by the late autumn some 75 per cent of the world's total tonnage was covered by ships' warrants. Nevertheless it was understood that in many instances navicerts were issued much too easily without adequately ascertaining that the goods concerned were not of enemy destination.

There were also other minor loopholes in the blockade. It is believed that a certain amount of German and Italian manufactures was exported through Switzerland and evaded the ban on German exports by being marked "Made in Switzerland". German optical instruments and other valuable goods were exported overseas from France or Spain by means of cargo-carrying aeroplanes.

Notwithstanding these and other loopholes, it may be said that at the end of 1940 the naval blockade was more effective than twelve months earlier. A number of diplomatic loopholes had ceased and the enemy was in a less favourable position than before to import bulky raw materials or to export on an extensive scale. The change of attitude in the United States also helped towards making the blockade more water-tight, as the Washington administration no longer insisted upon the relaxation of the blockade in favour of a limited German-American trade. The import of mineral oil and lubricating oil from overseas became more difficult than ever, especially as the United States placed an embargo on the export of certain categories of oil products. And since the outcome of the war will be determined to a large degree by oil supplies, the success of the Royal Navy in stopping these supplies from reaching Germany and Italy may be considered as an achievement of first-rate importance.

During the summer and early autumn it was considered possible that as a result of the defection of France the British Army in the Middle East might be unable to uphold the control of the Eastern Mediterranean and that an Italian attack on the Suez Canal combined with a German drive through the Balkans would secure for the Axis the control of the Iraq oil and even of the Iran oil. Such developments would have frustrated the naval blockade. Fortunately the military situation towards the end of 1940 changed in favour of Great Britain, and after the victories in Libya and Albania the menace to British control over the Middle East oil supplies appeared to have become remote.

CHAPTER V

DIVERSION OF SUPPLIES FROM GERMANY

GERMANY'S position in face of the naval blockade was, as we have seen, already much more favourable in 1939 than in 1914 and subsequent war years. On the present occasion she was not encircled by an iron ring of hostile countries but was in a position to trade with all Continental neutrals with the exception of Spain and Portugal. Even as far as Spain was concerned there were possibilities of trading through the intermediary of other Continental neutral countries, or, in the case of valuable consignments such as quicksilver, by means of air transport. Admittedly the countries contiguous to Germany were unable to satisfy many of her essential requirements. They were not in a position to supply adequate quantities of oil, rubber, cotton, or of certain metals. Even regarding animal fats and certain other essential foodstuffs and feeding stuffs the exportable surplus of the Continental neutral countries was not sufficient to cover Germany's full requirements. Nevertheless, by being able to draw upon the resources of these countries, Germany was in a position to cover quite a considerable proportion of her essential requirements.

It was therefore important to make an effort to prevent or reduce German purchases of essential raw materials from countries whose exports to Germany could not be intercepted by the Allied naval forces. There were two means at the disposal of the Allies

to achieve that end. They were in a position to apply diplomatic pressure to induce various neutral countries to abstain from selling essential materials to Germany, or at any rate to limit the quantity of their sales of such materials. They were also in a position to reduce the volume of such materials available for German purchases by means of pre-emptive purchases, that is, purchases for the purpose of diverting these supplies from Germany.

Admittedly, from the point of view of diplomatic pressure, the Allies were in an unfavourable position compared with Germany, for the simple reason that every Continental neutral country had more reason to be afraid of her than of Great Britain and France. Apart from the fact that the military power of the Allies east of the Maginot Line and of the Italian Alps appeared to be negligible, the neutrals were safe in taking for granted that Great Britain or France would not invade them because of their export trade to Germany. On the other hand, these countries were equally certain that were they to refuse to sell to Germany considerable quantities of essential materials, they would expose themselves to military reprisals on her part. Indeed they were hoping against hope that they could escape being invaded by Germany by making themselves useful to her.

Nevertheless, all the Continental neutral countries were in need of foreign exchange for the purpose of importing essential overseas products. Consequently, notwithstanding the diplomatic pressure brought to bear upon them by Germany, they were prepared to sell to the Allies considerable quantities of goods in order to be able to import what they needed. There were, therefore, ample possibilities for Great Britain

and France to embark upon an active policy of pre-emption in South-Eastern Europe, the Baltic States and other parts of Europe.

The policy of pre-emptive purchases constituted the logical continuation of the policy of economic assistance to South-Eastern Europe adopted by Great Britain and France about a year before the outbreak of the war. After the Austrian *Anschluss* the British and French Governments realised that Germany had succeeded in securing the control of an unduly large share of the trade of South-Eastern Europe. Since it was evident that this economic penetration served the purpose of establishing political control over the Danubian and Balkan countries, it was essential for the Allies to take action to enable South-Eastern Europe to safeguard its economic and political independence against German peaceful penetration. The principle was admitted during the early summer of 1938 ; but both Great Britain and France were very slow in putting the principle into practice. What was needed was the purchase of substantial quantities of goods in South-Eastern Europe, irrespective of commercial considerations. The result of the German penetration was that the prices in these countries rose above the world market level, so that generally speaking it was not a commercial proposition for Western European countries to buy South-Eastern European products. From a political point of view, however, it was well worth the British and French Governments' while to make financial sacrifices for the purpose of preventing a complete German trade monopoly in South-Eastern Europe. Certain purchases for that purpose were actually made before the war. The best-known transaction was the purchase of

200,000 tons of Rumanian wheat by the Food Defence Department of the Board of Trade. Generally speaking, however, it is true to say that commercial considerations were allowed to prevail and to prevent British or French purchases in South-Eastern Europe on a large scale.

The outbreak of the war created an entirely new situation. While before the war it may have been a matter of opinion whether or not it was advisable to make sacrifices for the purpose of diverting from Germany part of the South-Eastern European export surplus, after the beginning of hostilities there could be no two opinions on the subject. The pre-war considerations of preventing a German trade monopoly in these countries continued of course to prevail. Had Germany been allowed to secure a monopoly, her political influence would inevitably have increased in the South-Eastern European neutral countries. The latter would then have been entirely at Germany's mercy, for a suspension of German purchases from them or sales to them would have brought about major economic difficulties. From this point of view alone it was even more essential than before the war to enable the Danubian and Balkan States to retain their political and economic independence. There was, however, another consideration which was even more important. Since, as a result of the naval blockade, Germany has come to depend upon her purchases of South-Eastern European products to a much larger degree than before the war, it was an essential part of our offensive economic warfare to reduce her possibilities of purchases from South-Eastern Europe. This aim could be achieved by means of buying up part of the supplies available for export.

In the competition for the purchase of South-Eastern European products, Great Britain was in many ways in a strong position. She was able to offer in exchange free sterling or even dollars, or what was even more important, overseas products. Considering that all the South-Eastern European countries obtained for the sales of their products to Germany was blocked marks, it was very tempting for them to sell at least a part of their products to Great Britain or France. Accordingly the British buying agents who were sent out to the Danubian States and the Balkans had a favourable reception. What is more, the South-Eastern European and Baltic States themselves took much trouble to increase their exports to Great Britain. They took the initiative for offering goods to the British Government or to British private importers. Admittedly the South-Eastern European Governments were themselves somewhat reluctant to do so, for fear that it might be resented by Germany. They did not prevent, however, private exporters from taking the initiative to increase their sales to Great Britain.

Although the pre-emptive purchases were surrounded by a cloak of secrecy and the British trade returns stopped at the beginning of the war to disclose the origin of imports, it is understood that a certain amount of Rumanian oil and various South-Eastern European foodstuffs and feeding stuffs were secured by Great Britain and to a less extent by France during the first eight months of the war. There were of course transport difficulties which had to be overcome through the organisation of special convoys. A certain amount of South-Eastern European products reached Great Britain also by rail through Italy and France.

Transport difficulties were even more considerable as far as the Baltic States were concerned. It was of course impossible to ship goods along the Baltic, which was under German control. A certain amount found its way to Great Britain, however, through Sweden, Norway and the North Sea. For the most part the additional costs of transport were borne by the exporting countries themselves, which were anxious to retain, at least in part, their British markets. For this reason these operations cannot be regarded as pre-emptive purchases proper.

Pre-emptive purchases did not by any means confine themselves to Europe. On the surface it would appear that since the naval blockade prevented the import of overseas products by Germany, there would be no need for such purchases. In reality, as we saw in Chapter III, the naval blockade was far from being water-tight. Germany was able to buy substantial quantities of overseas products and she also found means for circumventing the blockade. While this was not easily done as far as bulky commodities are concerned, it was comparatively easy regarding rare metals and a few other essential commodities. It was important, therefore, from a British point of view to corner the supply of these commodities in the overseas producing countries. Accordingly pre-emptive purchases were undertaken in various countries from China to Peru.

One of the advantages of pre-emptive purchases from a British point of view was that they put up the price of essential products against Germany. Since the Allies possessed incomparably superior financial resources, they could well afford to make sacrifices provided that in doing so they made it more difficult

for Germany to finance her imports. This principle was not unanimously endorsed in British official circles. It is understood that the Ministry of Food held the view towards the end of 1939 that it would be a short-sighted policy for Great Britain to bid up the price of products in Continental neutral countries, because in doing so she would encourage an increase of animal breeding and agricultural production in general, and that the result in the long run would be an increase in the supply available for Germany. This attitude is the very negation of the principle of pre-emption which was part of the declared policy of the Ministry of Economic Warfare and of the Government as a whole. Nor does the attitude of the Ministry of Food appear to be very reasonable. After all, if Great Britain refuses to make pre-emptive purchases for fear that as a result the supply available for Germany in the countries concerned would increase, she actually enables Germany to buy more immediately. Whether or not British pre-emptive purchases would lead eventually to an increase of supplies available to Germany is open to argument. It is certain, however, that by abstaining from pre-emptive purchases the British Government would enable Germany to increase her immediate purchases.

Another Government Department which was opposed to pre-emptive purchases on a large scale was the Treasury. Its officials recalled the unfortunate experience during the last war when goods bought by Great Britain in Bulgaria for the purpose of diversion from Germany fell into Germany's hands after the entry of Bulgaria into the war. In Rumania it became necessary to destroy large quantities of wheat bought during her period of neutrality by the British Govern-

ment, owing to the suddenness of the German advance in 1916. Nevertheless these objections have been overruled, at any rate in principle.

In order to overcome the difficulties caused by the cumbersome apparatus of Government Departments, the Government established early in 1940 the United Kingdom Commercial Corporation, for the purpose of carrying out pre-emptive purchases. This company, whose sole shareholder was the Treasury, had an initial share capital of £500,000 and its task was to facilitate trade with South-Eastern Europe. Its establishment was urged in many quarters long before the war, and it was deplored that, when at last the Government decided to act, the resources placed at the new company's disposal were only half a million pounds. It was not generally known that even that amount was only provided with the utmost reluctance by the Treasury, whose original suggestion was a capital of £50,000. We shall see in Chapter VI that the short-sightedness of the Treasury, together with red tape in other Departments, constituted an insurmountable obstruction to the development of pre-emption on a really impressive scale.

CHAPTER VI

INADEQUATE PRE-EMPTION

WE saw in Chapter III that during the first eight months of the war the Government's attitude towards the enforcement of the blockade was far from satisfactory. The same is true concerning the Government's policy of pre-emption. It took some four months before political circles and the public discovered the loopholes in the blockade. It took much less time, however, before the shortcomings of the Government's policy of pre-emption in practice became evident. By October 1939 complaints were pouring in from all sides, and throughout the late autumn and the winter the Government was bombarded with questions in Parliament on the subject.

The complaints against the Government's attitude towards pre-emption may be summed up under three headings :

- (1) The Government operated on a much too small scale to bring about any appreciable reduction of supplies available for Germany.
- (2) In considering proposals the Government continued to act on pre-war principles. Unless the transaction appeared to be commercially satisfactory it was declined.
- (3) Pre-emptive purchases were delayed and sound schemes frustrated owing to red tape in the Government Departments concerned.

The smallness of the scale on which pre-emptive

purchases were made was largely the result of the Treasury's narrow and short-sighted attitude. The amounts allotted by the Treasury for the purposes of pre-emption were very small. In this respect the Treasury pursued its policy adopted before the war during the period of the German trade drive in South-Eastern Europe. Even though on principle the Government agreed to assist South-Eastern European countries against coming under German trade monopoly, in practice the actual extent of this assistance was kept down by the Treasury's tightfistedness. During the spring of 1938 a Turkish delegation came to London to discuss a loan transaction with the Government. The Treasury was unable to prevent this transaction, which was decided upon by the Cabinet as a major matter of policy, but did its utmost to procrastinate, and on several occasions negotiations came very near a breakdown. It was not until Mr. Chamberlain himself instructed the Treasury to conclude the agreement without further delay towards the end of May that the agreement was at last concluded. During the autumn of 1938 the Foreign Office was pressing for the purchase of 400,000 tons of Rumanian wheat in order that Rumania should not depend entirely upon German purchases. The Treasury was opposed to this purchase and eventually a compromise was reached and 200,000 tons were purchased. During the spring of 1939 the Treasury cut down the amount of special aid allotted to Greece to a purely nominal figure. It was hardly more than "token assistance". Similar examples could be multiplied to show that the Treasury's attitude towards South-Eastern Europe was to give as little assistance as possible and give it as slowly as possible.

Another cause for the inadequate extent of pre-emption was the insistence of the Government Departments concerned upon observing pre-war commercial principles in regard to the proposed transactions. The whole substance of the principle of pre-emption lies in the diversion of supplies from the enemy irrespective of commercial considerations. During the autumn of 1939 and the winter of 1939-1940 this truth did not appear to have been realised by Government officials. They were haggling for a reduction of the price and insisted that if the world market price of the goods concerned was lower than the local price in the countries to be pre-empted, then it is the Governments of the countries concerned which should pay the difference. To take an example, instead of buying up all the Rumanian oil it could lay hands upon from the very beginning of the war, the Government was haggling about the terms for months, wasting precious time and opportunity. It was not until towards the end of 1939 that a really serious attempt was made to buy Rumanian oil. The same attitude was adopted towards butter and bacon purchases from the Baltic States at a time when it was obvious that anything that was not bought by Great Britain was bound to be sold to Germany. During the autumn of 1939 the German Government carried out the re-settlement of Germans from the Baltic States. The bank balances and other assets of these Germans were transferred to a trust controlled by the German Government. Consequently the German Government had substantial amounts of cash available for spending in the Baltic States. It bought as much butter, bacon and other products as the Baltic Governments were prepared to sell. Since

there were no alternative markets apart from Great Britain, any quantities which could not be sold here were automatically sold to Germany. Although this fact was known in London, in spite of this the Ministry of Food was haggling over the price of Baltic butter and bacon. Owing to the German control over the Baltic sea route it was necessary to send the consignments via Scandinavia, which increased their cost considerably. Notwithstanding this the Baltic sellers were prepared to quote the same prices for deliveries in London as the Danish sellers. The Ministry of Food pointed out, however, that since before the war there was a difference of 10 per cent between the price of Baltic butter and Danish butter, the former should continue to be 10 per cent cheaper than the latter.

Business men who joined Government Departments for the duration of the war proved to be even more difficult than the permanent officials. Having spent all their life haggling over fractional differences in prices, they simply could not suddenly change their attitude and miss an opportunity for obtaining a reduction of $\frac{1}{4}$ d. if there was a chance of doing so. They did not realise that there were much more important considerations at stake than fractional differences in the price. They wanted the Government to obtain the full benefit of their pre-war experience in haggling and wanted to show what they could do.

Government officials engaged in negotiating pre-emptive purchases were too businesslike also regarding the terms of delivery. In one instance a British firm of importers made an offer to the Government to deliver a large number of pigs from Rumania. It took the Ministry of Food some eight weeks to answer the letter, and then it informed the firm in question

that it was prepared to make a purchase provided that the firm would guarantee regular fortnightly deliveries of fixed quantities. Considering that the transport difficulties which prevailed even then were generally known, it was hardly reasonable to expect such an undertaking of any firm.

British and foreign firms attempting to induce the Government to make pre-emptive purchases found their efforts frustrated by the incredible degree of red tape that prevailed in Government Departments. Most transactions had to be approved by several Departments. The Ministry of Economic Warfare usually had a say in it and, according to the nature of the goods, the transaction had to be approved by the Ministry of Food, Ministry of Agriculture, Department of Mines, Ministry of Supply, and last but by no means least, by the Treasury. There was an almost complete lack of co-ordination between these Departments, and their attitude towards the principles involved in various transactions was often in conflict with each other. Each Department took time over considering the transaction, and, more often than not, by the time all of them made up their minds to buy the goods offered it was too late.

In the circumstances it is not at all surprising that pre-emption did not make much progress. While the funds allocated by the Treasury for that purpose were moderate, German buying agents in the countries concerned had unlimited resources at their disposal. They had instructions to buy up everything, and while British Government Departments were haggling over the price and terms of delivery, German buying agents were instructed to buy at any price obtainable and relieve the sellers of the problem of delivery by taking

over the goods on the spot. While British negotiators had to refer back every transaction to several Government Departments, the German buying agents had full powers to decide everything on the spot. As a result of these advantages they succeeded in buying up everything worth having in the Balkans and in the Baltic States. They induced the Rumanian Government to increase oil exports to Germany, and in spite of this it was impossible to import large quantities during the winter of 1939-1940, this was due to the severe winter conditions for which British Government Departments can hardly claim credit. During the autumn of 1939 German buyers secured vast quantities of foodstuffs and feeding stuffs. In respect of the latter the shortsightedness of British Government Departments was all the more striking since there was an acute shortage of feeding stuffs in Great Britain. Notwithstanding this, they were haggling month after month about terms and gave German buyers a chance to secure practically the entire supply.

As a result of the rising tide of criticism, efforts were made to obtain better co-ordination between the Government Departments concerned with pre-emptive purchases. Interdepartmental Committees were established to accelerate decisions. During the early months of 1940 there was in fact some improvement and a number of transactions were actually concluded. By that time, however, the quantities of animal products and other foodstuffs and feeding stuffs available became materially reduced as a result of the large German purchases. Notwithstanding the barrage of criticism Civil Servants were simply unable to adjust their minds to changed conditions and act quickly. They continued to pursue the time-honoured

principle that the less decisions are taken the less likelihood there is for them to make mistakes. They preferred to evade responsibilities by referring everything to Committees, asking for a second, third and tenth opinion, and doing their best to postpone the evil day when they eventually had to make up their minds. And above all the great bottle-neck of Whitehall, the Treasury, continued to reign supreme.

Early in 1940 a belated effort was made to short-circuit the red-tape-ridden Government Departments through the establishment of the United Kingdom Commercial Corporation. This was a firm which, although controlled by the Government, was to act in a swift and businesslike manner. Its sphere of activities was originally limited to the six South-Eastern European countries, which was perhaps as well since its total initial resources only amounted to £500,000. Needless to say it was difficult to expect the firm to operate on a large scale with the aid of such a small amount. Nevertheless it embarked upon establishing contacts in South-Eastern Europe and was preparing to do its best when, as a result of the military disasters of May and June 1940, the political situation in the Balkans underwent a considerable change. Had the United Kingdom Commercial Corporation been established at the beginning of the war and had it been endowed with adequate resources, it would have been able to divert quite considerable quantities of essential foodstuffs and materials from Germany. As it was its work in South-Eastern Europe became gravely handicapped by political developments by the time it was ready to act.

Nevertheless the United Kingdom Commercial Corporation succeeded in making substantial purchases

in Rumania, Yugoslavia, Bulgaria and Turkey. It was given the monopoly of the sale to those countries of a number of important Empire products such as jute, rubber, tin, etc., and during the summer of 1940 it concluded a number of interesting transactions. Owing to the transport difficulties the goods purchased in South-Eastern Europe were for the most part accumulated in Smyrna, pending an opportunity for their transport to Great Britain. During the late summer political developments made it impossible to transact any more business with Hungary or Rumania, and business with Yugoslavia was also becoming increasingly difficult owing to the growing German pressure upon that country. The United Kingdom Commercial Corporation continued to do business, however, with Greece, Bulgaria and Turkey.

Fortunately it was realised in official quarters that even though the firm was established for trading with South-Eastern Europe there was no reason why its activities should be confined to that sphere. When as a result of the conquest of France, Spain and Portugal became contiguous to Germany it was decided to carry out pre-emptive purchases in those countries. Unfortunately the mistakes made in the Balkans and in the Baltic were also repeated in the Pyrenean Peninsula. While various Government Departments were arguing about the nature and extent of the firm's operations in Spain and Portugal, Germany was acting with her customary swiftness. Her buying agents purchased everything they could lay hands upon in Spain and Portugal. By the time the representatives of the United Kingdom Commercial Corporation arrived in Madrid and Lisbon there was very little left for them to do. They did

make some purchases but the volume involved was insignificant compared with the volume secured by German buyers.

During the summer of 1940 it was decided to extend the operations of the United Kingdom Commercial Corporation over Latin America. Accordingly, arrangements were made for the firm to appoint representatives in the principal Latin American countries. It was planned that, in order to secure steady and punctual deliveries, depositories of British goods should be created in Latin America under the auspices of the United Kingdom Commercial Corporation. It is as yet premature to express any opinion about the activities of that firm in Latin America, and it is hoped that as a result of the work of the British trade delegation under Lord Willingdon, which visited various South American capitals towards the end of 1940, British purchases from those countries will increase.

Admittedly purchases in Latin America would not constitute pre-emption in the strict sense of the term, for owing to the blockade Germany has, in theory at any rate, no means for importing goods from that continent. In practice, however, there are still loopholes in the blockade and pre-emptive purchases of rare metals and other essential goods in overseas countries are now as important as ever.

It is understood that Germany has been buying substantial quantities of goods in both occupied and unoccupied China. While it would be difficult to prevent her purchases from that part of China which is under Japanese occupation, it would be reasonable to expect the Government to intervene in unoccupied China and reduce German purchases by means of pre-

emption. Both Great Britain and the United States have been granting credits to China recently, and it might have been possible to insist upon a diversion from Germany of the exports of special metals and other essential Chinese products as a condition of these credits.

Unfortunately Germany's foreign exchange resources increased considerably as a result of the conquest of Western European countries. Even though the British and United States Governments blocked the assets of the nationals of these countries, the German invaders were bound to seize substantial amounts of gold, foreign notes and marketable foreign securities. At the same time Germany has also been exporting looted art treasures and other valuable objects, and secured the proceeds in foreign exchange. As a result she is now in a better position than before to make purchases in overseas countries. This is an additional reason for intensified pre-emption on the part of Great Britain.

Admittedly the task of embarking upon pre-emptive purchases on a large scale all over the world is by no means easy. For one thing Great Britain has responsibilities towards producers in the British Dominions and Colonies and also in those French Colonies which have recognised General de Gaulle, in addition to the Dutch and Belgian colonies. To buy up all their exportable surpluses is in itself a formidable task. Nevertheless it is essential that Great Britain, in co-operation with the United States, should buy up the surpluses of other overseas countries. Otherwise the unsold surpluses would bring about a slump in the countries concerned and this would give German propaganda an excellent opportunity for

blaming Great Britain for all their troubles. The pro-British régimes in various Latin American countries might then be overthrown and replaced by pro-Axis régimes which would press for a relaxation of the blockade. For this reason alone it would be advisable for Great Britain to extend pre-emptive purchases over Latin America.

CHAPTER VII

OTHER WEAPONS OF ECONOMIC WARFARE

IN addition to the major weapons of the blockade and of pre-emption there are various other weapons in the armoury of economic warfare. Their object is in part to secure the efficient enforcement of the blockade and in part to prevent Germany from using her financial resources abroad. The former end is attained mainly by making it difficult for neutral firms to act as intermediaries for the benefit of Germany. The latter aim is pursued largely with the aid of the various methods of financial warfare.

Already during the last war the system of the black-lists of German-controlled firms or of firms acting as intermediaries for the benefit of Germany was applied with great success. At the beginning of this war the same method was resorted to and the first black-list soon made its appearance. It was followed by additional lists, and by the end of 1940 the number of names on these lists grew to a formidable figure. The black-lists did not of course cover firms registered in Germany which were already covered by the provisions of the Trading with the Enemy Act. Its object was to prevent British firms from trading with firms which, while technically neutral, were in reality German, or which through their close connections with Germany were likely to serve mainly German interests.

The black-listing of German-controlled firms re-

gistered in neutral countries was a very slow process — unnecessarily slow in many respects. The early lists contained some very strange anomalies. While some branches or affiliates of certain firms were included, other branches or affiliates which belonged to the same firms were omitted. It took many months before these anomalies were gradually eliminated, and even at the end of 1940 some of them were allowed to survive.

The process of black-listing was particularly slow as far as German-controlled banks were concerned. The first black-list contained only two banks registered in neutral countries, and both were subsequently removed from the black-list as a result of representations by their British banking connections. Yet there were some very important German bank affiliates in Holland, the Balkans, the Far East and Latin America, which were known to be entirely under German control. There could be little doubt, for instance, about the nationality of the Deutsch-Asiatische Bank in Shanghai. Yet month after month was allowed to pass without any steps being taken to place the names of these banks on the black-list. In many instances this delay was explained on the ground that it was necessary to enable London banks to collect their claims against these banks before placing them on the black-list. Unfortunately the concession made to that end cut both ways. For months after the outbreak of the war there was nothing to prevent these banks from withdrawing their balances from London. It is difficult to form an opinion whether the total of such balances withdrawn was in excess of the total of credits repaid during the months of grace.

In any case, since most banking credits expire

within six months, it was reasonable to expect that the black-list of German-controlled banks would be complete by February 1940. Even after that date, however, progress was somewhat slow.

The black-list was not confined to German-controlled banks. From June 1940 onwards it was extended over Italian-controlled banks and over neutral firms under Italian control or trading with Italy. Subsequently the firms of Vichy-controlled France and Vichy-controlled French colonies were also included, while the firms in occupied France and other countries under German occupation were covered by the Trading with the Enemy Act.

In addition to the black-list proper there was also a so-called "grey-list" which was not published. It included the doubtful cases, and British banks and firms were required to apply to the Ministry of Economic Warfare for advice before entering into any new transaction with such firms. Unfortunately the Ministry of Economic Warfare was rather slow in giving the advice required and banking business was unnecessarily held up by delays. Frequently it was decided to remove some names from the black-list and this made matters even more complicated. During the second year of the war the authorities adopted the practice of issuing from time to time consolidated lists, in order to facilitate the task of banks and other firms engaged in foreign business.

It is beyond doubt that the black-lists acted as a powerful deterrent for genuine neutral firms to trade with Germany. After all, owing to the blockade, the trading possibilities with Germany were, generally speaking, limited. It was risky for a neutral firm engaged in foreign business to expose itself to being

boycotted throughout the British Empire. This meant of course that in order to be able to find neutral intermediaries, Germany had to pay them larger commissions. Even if it did not prevent blockade evasion, it certainly increased the costs for Germany and thereby contributed towards the reduction of her foreign exchange resources.

The blocking of enemy assets constituted another powerful means for reducing the foreign exchange resources at Germany's disposal. British banks and other holders of German-owned assets were required at the beginning of the war to declare or to surrender these assets to the Custodian of Enemy Property. This measure covered a very large proportion of German assets in Great Britain, but it was far from adequate. A by no means negligible proportion of German assets was kept in London in the name of neutral nominees. Even though it would have been the duty of these neutral nominees to declare these assets, in many instances they failed to do so. In particular one neutral bank is known to have shielded a very substantial amount of German-owned sterling assets. The bank in question continued to collect interest on German-owned securities even though under the law these securities should have ceased to receive interest or dividend and should have ceased to be good delivery on the Stock Exchange. There is reason to believe that considerable amounts of enemy-owned sterling securities were realised in London during the early part of the war. As is well known, before the war Germany repurchased at a heavy discount a large proportion of her sterling issues. At the beginning of the war she was able to place in London part of these repurchased loans. A certain amount

of Dawes and Young loan was thus sold in London towards the end of 1939 and the beginning of 1940. In answer to questions in Parliament, Lord Simon, then Chancellor of the Exchequer, denied that any such sales were possible on any material scale and did not consider it necessary to take further steps. Nevertheless, before very long steps were taken to make the realisation of foreign-owned sterling securities more difficult. In this respect, as in many other respects, the stopping of leaks proceeded at an unnecessarily slow pace. In many instances the stable door was bolted after the horse had gone.

In the matter of preventing the liquidation of enemy-owned securities the Treasury adopted the comfortable solution of placing on the shoulders of banks and brokers the responsibility for ascertaining the ownership of the stocks they offered for sale. It was of course impossible for them to know who was the real owner of securities which they were instructed to sell by some bank in a Continental neutral country. In the absence of evidence to the contrary they were inclined to accept the word of foreign banks that the securities were not owned by enemy subjects. The only watertight method would have been to prevent altogether the sales of foreign-owned securities, or alternatively to block the proceeds of such sales. Eventually this latter solution was actually resorted to, but not until after the withdrawal of German-owned funds had continued almost unhampered for many months. As far as enemy assets in the form of securities are concerned the system is now reasonably watertight. On the other hand, it is still possible for enemy subjects to withdraw sterling balances held in the name of neutral banks.

The United States authorities also made an effort to prevent the realisation of German-controlled foreign assets. Admittedly they did not interfere with assets owned by German subjects, apart from the blocking of deposits at the beginning of the war, pending the settlement of American Standstill credits to Germany. On the other hand, whenever Germany invaded a country the assets belonging to nationals of that country were promptly frozen by the United States authorities. By such means it was possible to save gold deposits and securities, amounting to over a thousand million pounds, from falling into German hands. Had it not been for the American measures the gold reserves of the Danish National Bank, the Bank of Norway, the Netherlands Bank, the National Bank of Belgium and even of the Bank of France would have fallen into German hands.

Even as it was the Germans succeeded in laying hands on very substantial amounts of gold and foreign assets in the conquered countries. These assets were gradually realised, largely through the intermediary of Swiss banks. During the months that followed the conquest of the Low Countries and France the clippers were kept busy with the transfer of stolen securities and dollar notes from Lisbon to New York.

At the same time the German agents in Lisbon — which became the principal foreign exchange market in Europe after the occupation of Amsterdam, Brussels and Paris — were busily engaged in selling pound notes. Large amounts of such notes were seized by the German occupation authorities in various countries and they were sold out in haste, partly in order to secure dollars and partly in order to depreciate the pound exchange rate. At that time the outlook for

Great Britain was very gloomy indeed and the only people who were prepared to buy pound notes were those who wanted to repatriate them to Great Britain. There was nothing to prevent them from paying the pound notes into their London accounts and selling the sterling balances in the unofficial market. This traffic was allowed to continue throughout June, July and the greater part of August. It was not until the end of August that the authorities took steps to check it by placing an embargo on the import of pound notes. Even then a transition period was fixed during which pound notes held by foreign banks were allowed to be imported. By the time the embargo became effective the Germans had probably sold out all their holdings.

In all these financial operations in Lisbon and in New York, Swiss banks were largely used by the German Government as intermediaries. According to one theory, one of the reasons why Switzerland has not yet been conquered is that the German Government finds her quite useful as a channel for its international financial operations. Most of the official German assets in New York have been transferred to the names of Swiss and Swedish banks.

Evidently in the sphere of financial warfare the Government was even slower in taking much-needed action than in the sphere of economic warfare. Many opportunities for offensive action were missed. For instance, in the early autumn of 1940 the German authorities bought up considerable amounts of German dollar bonds for the sake of increasing Germany's prestige in the United States. The result was a material rise in the price of these bonds in Wall Street. The British authorities ought to have taken advantage

of these operations for unloading the substantial amounts of German dollar bonds held by British Insurance Companies, Investment Trusts, etc. This would have had a twofold advantage. It would have secured for the Treasury substantial amounts of much-needed dollars, and it would have checked the rise in German dollar bonds or, alternatively, the German authorities would have had to spend larger amounts of their dollar balances in order to bring about the same rise.

Another opportunity which was missed was during the summer of 1940 when, for reasons best known to themselves, the German authorities embarked upon the support of the franc notes in Lisbon. They bought up substantial amounts, presumably as part of their attempt to gain favour with the ruling class at Vichy and with French small rentiers in general. Since the British authorities were in possession of franc notes amounting to hundreds of millions, they would have been in a position to frustrate the German efforts and at the same time to secure dollars through the realisation of their hoardings of these notes. They did not take any action, however, and the Germans were allowed to proceed with their operations without encountering any opposition from the British side.

CHAPTER VIII

AIR BOMBING IN THE SERVICE OF ECONOMIC WARFARE

IN the late spring of 1940 a new method made its appearance and gained prominence in the sphere of economic warfare. It was the destruction of the enemy's supplies, means of production and means of transport through air bombing. From May 1940 onwards the Royal Air Force has been engaged in the systematic bombing of German targets (and subsequently Italian targets) for the purpose of reducing the economic war potential of the enemy. It was some time before the significance of air raids from the point of view of economic warfare came to be realised. Even now, after many months of economic warfare by air attacks, this aspect of air warfare is not appreciated by many people.

Air attacks can serve three purposes. They can aim at weakening the fighting forces of the enemy by bombing or machine-gunning their armies, navies or air forces in the air or on the ground. They can serve the purpose of demoralising the civilian population by indiscriminate bombing of towns and villages, and they can also pursue the object of weakening the economic resources of the enemy by the destruction of food and raw material supplies, factories, railways, canals and seaports. We are only concerned with air attacks pursuing the latter purpose. It is of course difficult to draw the line between air raids serving various purposes. If an aerodrome is bombed, for instance,

the destruction of warplanes, hangars, etc., serves a purely military purpose, but the destruction of oil supplies serves both a military and an economic purpose. If a town is attacked and a large number of casualties is caused in working-class quarters, the attack is aimed as much at the weakening of the nation's productive capacity as at the weakening of its morale. Frequent nuisance raids aim at slowing down production and, at the same time, at wearing down the nerves of the population. If naval dockyards are attacked the destruction of warships serves a direct military purpose, but the reduction of the shipbuilding capacity of the opponent is primarily an economic objective. The bombing of the same target can serve any of the three purposes. A railway junction may be bombed to demoralise the public, or to prevent reinforcements and supplies from being rushed to the scene of an offensive, or simply to increase the economic difficulties of the opponent.

During May and June the activities of the R.A.F. served mainly a military purpose, but even during that period there were frequent raids on German industrial targets in the Ruhr and elsewhere. Between June and September the activities of the R.A.F. were fairly evenly divided between military and economic purposes. The systematic bombing of invasion ports pursued a purely military aim, even though, in so far as it resulted in the destruction of oil supplies, it also served economic aims. Simultaneously with the nightly attacks on invasion ports R.A.F. bombers also visited German factories, railway yards, etc. The object of these attacks was mainly economic, even though in some instances they aimed at slowing down the transport of troops and supplies to the invasion

CHAPTER VIII

AIR BOMBING IN THE SERVICE OF ECONOMIC WARFARE

IN the late spring of 1940 a new method made its appearance and gained prominence in the sphere of economic warfare. It was the destruction of the enemy's supplies, means of production and means of transport through air bombing. From May 1940 onwards the Royal Air Force has been engaged in the systematic bombing of German targets (and subsequently Italian targets) for the purpose of reducing the economic war potential of the enemy. It was some time before the significance of air raids from the point of view of economic warfare came to be realised. Even now, after many months of economic warfare by air attacks, this aspect of air warfare is not appreciated by many people.

Air attacks can serve three purposes. They can aim at weakening the fighting forces of the enemy by bombing or machine-gunning their armies, navies or air forces in the air or on the ground. They can serve the purpose of demoralising the civilian population by indiscriminate bombing of towns and villages, and they can also pursue the object of weakening the economic resources of the enemy by the destruction of food and raw material supplies, factories, railways, canals and seaports. We are only concerned with air attacks pursuing the latter purpose. It is of course difficult to draw the line between air raids serving various purposes. If an aerodrome is bombed, for instance,

the destruction of warplanes, hangars, etc., serves a purely military purpose, but the destruction of oil supplies serves both a military and an economic purpose. If a town is attacked and a large number of casualties is caused in working-class quarters, the attack is aimed as much at the weakening of the nation's productive capacity as at the weakening of its morale. Frequent nuisance raids aim at slowing down production and, at the same time, at wearing down the nerves of the population. If naval dockyards are attacked the destruction of warships serves a direct military purpose, but the reduction of the shipbuilding capacity of the opponent is primarily an economic objective. The bombing of the same target can serve any of the three purposes. A railway junction may be bombed to demoralise the public, or to prevent reinforcements and supplies from being rushed to the scene of an offensive, or simply to increase the economic difficulties of the opponent.

During May and June the activities of the R.A.F. served mainly a military purpose, but even during that period there were frequent raids on German industrial targets in the Ruhr and elsewhere. Between June and September the activities of the R.A.F. were fairly evenly divided between military and economic purposes. The systematic bombing of invasion ports pursued a purely military aim, even though, in so far as it resulted in the destruction of oil supplies, it also served economic aims. Simultaneously with the nightly attacks on invasion ports R.A.F. bombers also visited German factories, railway yards, etc. The object of these attacks was mainly economic, even though in some instances they aimed at slowing down the transport of troops and supplies to the invasion

ports. From October 1940 onwards the activities of the Bomber Command aimed almost entirely at weakening the economic war potential of the enemy.

Ever since the beginning of the systematic bombing of London in September 1940, strong pressure was brought to bear upon the Government to embark upon reprisals. It is to the credit of the Government that it resisted the popular clamour for indiscriminate bombing of Berlin or other big German towns. Although such bombing would have caused satisfaction to those who had to put up with indiscriminate German bombing, its effect upon Germany's military strength would have been negligible. It is doubtful whether at that stage it would have affected German morale to any appreciable extent. It would certainly have affected Germany's economic war potential to a relatively moderate extent only.

It ought to be borne in mind that at that time the number of bombers Britain was able to use for air attacks on Germany represented only a small fraction of the number of bombers Germany was able to use against Great Britain. Notwithstanding optimistic statements to the contrary, there is every reason to believe that the German output of warplanes is still far in excess of the British output, especially since, as a result of the victories in Northern and Western Europe, Germany secured for herself the use of the industrial resources of some highly industrialised countries. Moreover, Great Britain had to divert part of her bomber forces to the Middle East. Deliveries from the United States were very slow, and the German air raids on Great Britain affected, to some extent at any rate, the productive capacity of the

British aircraft industry just at a time when it was beginning to come into its full stride.

In such circumstances it would have been simply criminal to waste the limited bombing power of the R.A.F. on indiscriminate bombing of non-military and non-economic targets. While indiscriminate bombing would have inflicted substantial material and financial losses upon the German nation, it would not have affected substantially its productive capacity. The extent of reprisals could not possibly have approached the extent of the destruction of British civilian property by indiscriminate German bombing. Germany would have easily got the better of the uneven contest. The British Government was very wise in restraining itself from reprisals in the form of indiscriminate bombing. The temptation must have been at times almost irresistible. In spite of this the R.A.F. Bomber Command confined itself to military and economic targets. The result was that month after month, while the total destruction brought about by German air attacks was probably well in excess of the total destruction brought about by the R.A.F. in Germany, the effect of the latter upon Germany's economic war potential was much more considerable than the effect of the highly destructive German air attacks upon Great Britain's economic war potential.

Owing to the limited number of bombers available it was impossible to attempt to destroy more than a small percentage of the extensive German supplies of essential materials and productive capacity. Consequently it was necessary to confine the attacks to certain carefully selected special branches of Germany's war production and special categories of Germany's war supplies. Unfortunately, while this principle was

recognised by the Government, in practice it was not always followed. There was a tendency to fritter away the limited strength of the Bomber Command upon attacks on a great variety of industrial objectives. The Ministry of Economic Warfare is understood to have been in favour of specialising in the destruction of oil targets and means of transport. It was only exceptionally that the Ministry of Economic Warfare put forward suggestions for extending operations to synthetic rubber plants and other objectives. Other influential advisers, however, urged the Air Ministry to attack various other industries engaged in the manufacturing of certain weapons or parts of weapons. Had it not been for the inability of the Air Ministry to resist many of these suggestions, the chances are that Germany's oil production and means of transport would have been affected to a much more considerable extent.

It was a mistake not to concentrate to a larger degree upon oil supplies, refining capacity and synthetic oil production, for, as is well known, inadequate oil supplies constitute the weakest spot in Germany's armour. Her capacity to produce war material of most kinds is immense. Since the acquisition of control over practically the entire iron ore and aluminium production of Europe, her essential supplies of metals — with the exception of copper and certain rare metals — are almost unlimited. In any case, since the disappearance of the French army the German requirements for military equipments of most kinds have become materially reduced. She can afford to concentrate on aircraft production. As to her capacity of aircraft production, it is simply vast, and even the utmost effort of the R.A.F. at its present

strength could only reduce it by a comparatively moderate percentage. On the other hand, the destruction of more oil targets would tend to paralyse the activities of the German army, navy and air force. Were it not for the inadequacy of oil supplies, German pilots would be better trained and air raids upon Great Britain would have been much more formidable. Had the bombing attacks of the R.A.F. been concentrated upon oil targets to an even larger degree, the extent of German air attacks could have been materially reduced.

Another mistake in British air bombing strategy from the point of view of economic warfare was the dispersal of bombing strength at any given moment. Not only did the Bomber Command try to destroy too many different kinds of targets, but it tried to destroy them at the same time. Night after night an endless list of objectives was attacked. The result was that the damage caused to any one objective was necessarily limited. Even after the Germans had shown by the examples of Coventry, Birmingham, Southampton, etc., what could be done by concentrated attacks, the R.A.F. continued to disperse its strength. The result was that in most instances the R.A.F. attacks did not do more than reduce temporarily the output of German oil plants and other factories. The Germans are extremely efficient in carrying out repairs in a very short time, and there is reason to believe that in many instances the damaged factories were restored in a few weeks or even in a few days. And even before the repairs were completed production continued on a more or less reduced scale. The fact that the Gelsenkirchen oil plant, for instance, had to be attacked many dozens of times shows in itself how

inadequate was the strategy pursued by the R.A.F. Bomber Command. A concentrated mass attack in the style of Coventry, repeated perhaps on three nights running, would have destroyed that oil plant completely. The R.A.F. could then have afforded to forget about Gelsenkirchen for at least eighteen months and to get on with the next job. It was not until towards the end of December 1940, and the beginning of January 1941, that the advantages of concentrated mass attacks began to be realised in British official circles. Even then they could not resist the temptation to disperse the bomber forces at least to some extent.

The Germans devised an ingenious method of keeping down the extent of British attacks on military and economic targets in Germany. Throughout the autumn and winter they succeeded in conveying the impression that an invasion of Great Britain was imminent. Consequently a very large percentage of the British bomber forces was employed upon the systematic bombing of the invasion ports. It is possible that had it not been for these systematic attacks, Germany would have attempted invasion. Even so, it is an open question whether it would not have been worth while to leave the German invaders to be dealt with by the Navy and by the Army and concentrate upon the destruction of economic targets in Germany, at any rate unless and until the invasion appeared to be really imminent.

Having said all this it is only fair to pay tribute to the very efficient way in which the R.A.F. made use of the limited bomber strength earmarked for the purpose of attacking economic targets in Germany and, to a less extent, in Italy. It is beyond doubt

that the R.A.F. produced the maximum result it could possibly have produced in the circumstances. Germany's oil stocks and her capacity of oil production and refining have been reduced to a very appreciable extent. At the same time her means of transport have been effectively disorganised. Even before the war the German State Railways suffered through lack of adequate replacements during the rearmament period. The strain upon the railway system through military requirements carried the process of deterioration much further. Even though the capture of rolling stocks in the conquered countries brought relief, this was more than counteracted by the systematic attacks on railway junctions and marshalling yards by the bombers of the R.A.F. At the same time, the attacks on canals and river ports and the destruction of many thousands of barges threw additional burdens upon the railway system. The destruction of oil supplies made it impossible to relieve the strain by an increase of road transport. Germany's shipbuilding capacity also suffered greatly through air attacks, though in this respect it is doubtful whether the gains through the conquest of several shipbuilding countries such as Norway, Denmark, Holland and France have been offset. For the rest, the attacks on chemical works in Mannheim, power stations in Berlin, etc., contributed towards the reduction of Germany's economic war potential, though, as I said above, it would have been infinitely more useful if all these efforts had been focussed upon oil targets and means of transport.

CHAPTER IX

EFFECTS OF THE BRITISH ECONOMIC OFFENSIVE

IN attempting to compile a balance-sheet of Great Britain's offensive economic warfare it is necessary to guard ourselves against the Scylla of undue optimism and the Charybdis of excessive pessimism. The former tends to generate complacency, while the latter tends to undermine the morale of the public. Both are dangerous from the point of view of our war effort.

It would be idle to attempt to marshal formidable columns of figures to show the extent to which Germany's economic war potential has been affected by blockade, pre-emption, air warfare and other methods of economic warfare. Undoubtedly such figures would look very impressive. They would impress not only the layman, but also the predominant majority of professional economists who are always apt to be impressed by arguments supported by figures, even if those figures are in reality utterly meaningless. In trying to estimate Germany's economic war potential and the effect of the British economic offensive upon it we have to face equations with three unknown factors, sometimes even with four unknown factors. From time to time I have been requested to give an estimate of Germany's oil supplies and to state my views on how long these supplies would last. In order to be able to comply with such requests it would be necessary for me to

know (*a*) how much oil Germany had at the outbreak of the war, (*b*) what has been her rate of consumption, (*c*) how much oil has been destroyed, (*d*) how much oil she has imported, (*e*) what has been her rate of synthetic oil production, (*f*) how much oil she has captured in conquered countries, (*g*) what will be her future rate of production, (*h*) what will be her future rate of consumption, (*i*) how much oil she will be able to import in future, (*j*) how much oil the R.A.F. will be able to destroy in future.

Nobody in this country could give an answer to any one of these questions with even approximate accuracy. The big oil companies and the authorities probably have a vague idea about Germany's pre-war stocks of oil, but apart from that any estimate is largely a matter of guesswork. The same is true to an even larger degree concerning Germany's other economic war potentials.

We saw in Chapters II and III that the blockade was never water-tight and that it was unable to prevent Germany altogether from importing essential materials or from replenishing her foreign exchange reserve by maintaining a certain amount of exports. Nevertheless the blockade, coupled with pre-emption, succeeded in preventing Germany from importing as much as she would have liked. For one thing, a large part of the goods which she bought overseas before the war or during the war never reached her ports. The ships carrying the cargoes were either captured by the Royal Navy or scuttled themselves or remained in neutral ports. Since the conquest of Scandinavia and the Low Countries, and more especially since Italy's entry in the war, it has become more difficult to evade the blockade. While until the spring of 1940 contra-

band goods were simply pouring into Germany through some half-dozen countries, there is now only one channel through which the blockade can be evaded on a really large scale. This channel is Soviet Russia. Fortunately the capacity of the Trans-Siberian Railway is by no means unlimited, and the extent of blockade evasion depends largely upon the volume of goods which this railway line can carry on German account. It seems reasonable to assume that the quantities obtained from overseas through that channel and through other minor channels which are still open, together with the quantities obtained from countries contiguous to Germany, have been to a large extent insufficient to cover current requirements in respect of some essential materials. Even during the first part of the war, before the conquest of the Scandinavian and Low Countries, Germany must have been drawing upon her reserves and was unable to replace them by production and imports. It is widely believed that the brief Polish campaign made such heavy inroads in Germany's oil reserves that Hitler considered it advisable to defer any further major operation until the spring of 1940, in order to be able to replenish in the meantime the depleted oil reserve. A shortage in lubricating oils developed at an early stage of the war. The supply of high-grade iron ore was also declining rapidly before the conquests during the spring of 1940, while other metals, such as tin, copper and especially ferro-alloys, were becoming definitely scarce.

Regarding the food situation, Germany had substantial reserves in wheat before the war and succeeded in buying up various kinds of foodstuffs in contiguous countries after the outbreak of the war. Nevertheless,

there was a distinct shortage in animal fats.

The result of the German victories during the spring and early summer of 1940 brought about a fundamental change in the situation. Vast quantities of essential materials came into Germany's possession. The amount of oil captured is believed to have been very large indeed, especially in France, where, during the latter phases of the collapse, no stocks were destroyed. While the retreating armies destroyed the oil reserves of Rouen and Le Havre and other major and minor depots, the vast underground oil storage tanks at Dijon and various other places were left untouched and were taken over by the Germans. Even in the Low Countries it was impossible for the retreating British armies or naval units in charge of the destruction of oil stocks to carry out their job thoroughly, and it became necessary for the R.A.F. to revisit Rotterdam and other places to complete the work of destruction. In Denmark the unnecessarily large oil reserves which were imported before the invasion, thanks to the slackness of the blockade, were taken over intact, and in Norway too the capture of all the major ports on the first day of the invasion enabled the Germans to lay hands upon the bulk of the oil supplies. In all the conquered countries Germany captured very large quantities of lubricating oil, in which there was an even more acute shortage than in fuel oils.

Germany also captured very large quantities of tin and copper, especially in Holland and in France. While a large part of the oil reserves of the conquered countries was destroyed either before their conquest or after, the entire metal stock remained in Germany's undisturbed possession. It is estimated that the

supplies of tin captured in Holland and France were sufficient to cover Germany's requirements for twelve months. Other materials captured in the conquered commercial ports of Western Europe included rubber and various essential foodstuffs. The shortage in animal fats and meat was relieved by the capture of stocks in Scandinavia and the Low Countries, though fortunately the Norwegian whaling fleet was away from home ports at the time of the conquest, so that Germany was unable to lay hands upon an unduly large quantity of whale oil. Germany's shortage of meat was temporarily relieved through the enforced slaughter of livestock in Denmark, Norway and Holland, though this process amounted to killing the hen that laid the golden egg.

In addition to seizing vast supplies of raw materials and foodstuffs, Germany also gained control of the productive capacity of the conquered countries. It is especially in this respect that wishful thinking must be guarded against. The experience of the last war was that the extent to which the Central Powers were able to derive economic benefits from the conquest of Rumania, Serbia, Poland and other parts of Russia, Northern Italy, Belgium and Northern France was relatively moderate. Their agricultural production in particular was barely sufficient to meet the requirements of the population itself. A large part of the industries taken over in the conquered countries ceased to produce, partly because they became damaged during the course of the hostilities and partly because the workmen managed to escape before the arrival of the conquering armies. The attitude of the population which remained in the conquered territories was utterly unhelpful to the conqueror and

the degree of collaboration established was negligible. Mines and factories were at a standstill and the only use Germany derived from them was when she removed their machinery and equipments.

There is no reason to suppose that this state of affairs would repeat itself during the present war. Indeed, according to experience to date, it appears to be possible to maintain production in the conquered countries to a relatively high degree. This was due in part to the swiftness of the German victories, as a result of which the damage suffered to the means of production was incomparably smaller than in some conquered territories during the last war, and owing to which the populations of most conquered territories had no chance to escape ; the majority of those who did take refuge abroad decided to return to their native land after the cessation of active hostilities on the Continent. The attitude of the population was also totally different compared with the last war. At that time everybody in the conquered territories regarded the German régime as purely temporary and was determined to carry on passive resistance to the utmost. In May 1940, after the unexpectedly swift German victories in Western Europe, however, there was a widespread belief that the German régime had come to stay, and that therefore there was no choice but to make the best of a bad job. Consequently most people in the conquered countries resumed their normal activities as far as this was possible. Even though the year 1940 was necessarily a bad year owing to the war and small crops, there is no reason to suppose that the productive capacity of the agriculture of the conquered countries will not be kept up during subsequent years. And since Germany is determined

to keep the population of the conquered countries on very short rations, the chances are that she will obtain a permanent surplus of current production over consumption. The same is presumably true concerning mining and forestry in the conquered countries. Indeed in respect of these two branches of production the occupation authorities will probably enforce a plunder economy which will increase the immediate output to the detriment of the long-range value of the assets. Industrial capacity necessarily suffered to a greater extent than agriculture, but in this respect, too, production can be maintained in so far as raw material can be provided and in so far as Germany wishes to maintain production instead of demobilising the industries.

It would be idle to deny that German-controlled territory at the end of 1940 was incomparably more self-sufficient than Germany was before the conquests. Apart from the sources of supply under direct German control, Germany also controlled effectively the iron ore production and industrial resources of Sweden and has gained direct access to the mineral resources of Spain. Her increased power on the Continent secured for her the certainty of the mineral resources of the great part of the Balkans, even if they were not actually conquered.

How far were these beneficial effects offset by the reinforcement of the blockade from the spring of 1940, and especially by the destruction of stocks and productive capacity by air attacks during the last seven months of that year? Here again we are largely in the realm of conjecture. Nevertheless, there are certain facts which enable us to form fairly definite opinions in several respects.

Let us take in the first place the oil position, which is by far the most important. A large part of the oil supplies captured in conquered countries, or subsequently transferred there for the use of the occupation forces, was destroyed by the persistent air attacks on the invasion ports. At the same time, very large quantities of oil supplies in Germany itself are known to have been destroyed. What is equally important, the producing capacity of German oil refineries and synthetic oil plants has been materially reduced, though, as I said in the previous chapter, in this respect the dispersal of the bombing power of the R.A.F. over too many kinds of targets prevented the accomplishment of a really thorough job. It is to be feared, however, that the quantity of oil and oil-producing capacity which is inaccessible, partly because it is outside the range of the British bombers, or because it is safeguarded against air attacks, is by no means inconsiderable.

On the other side of the balance-sheet there is the acquisition of control over Rumanian oil production and the continued influx of oil through the Trans-Siberian Railway. Regarding Rumania, official quarters in London are inclined to indulge in a great deal of wishful thinking. They are inclined to under-rate the extent to which, during the course of a prolonged war, the Rumanian oilfields would be able to contribute to Germany's oil supplies. It is argued that the Rumanian oil output showed a steady declining tendency during recent years and that, in any case, transport facilities by rail or on the Danube are limited. Regarding the first argument, it must be pointed out, however, that the decline in Rumania's oil production was largely the result of the new

Rumanian mining legislation, owing to which the foreign mining companies controlling the majority of the concessions were unwilling to sink more capital in the country. Consequently exploration declined to a considerable degree. Under German control, however, the Rumanian oilfields are likely to be explored and exploited to the utmost degree without regard to commercial considerations. During the next few years at any rate the Rumanian oil output is likely to increase materially.

As for transport difficulties, they are very real indeed. The Danube is frozen during part of the year and the number of Danube oil tankers is limited. Railway facilities are also far from adequate. Nevertheless it will be possible to transport very large quantities of oil, even in the absence of Danube tankers or tanker carriages, by means of transferring the oil into barrels. This is certainly not an economic proposition, but such considerations will play no part in determining the methods employed by Germany. Above all, assuming that the war will continue for years, Germany is likely to construct a pipe-line with the aid of which the transport facilities could be largely overcome. It seems probable, therefore, that in the course of time the quantity of oil obtained from Rumania will increase.

Admittedly Rumanian crude oil may be attacked easily after its arrival in German refineries. Rumania has, however, by no means inconsiderable refining capacity and the refined products will probably be dispersed among the smaller storage centres. Moreover, the German Army can use Rumanian oil without having to transport it to Germany. At the time of writing a large German army is being concentrated in

Rumania in order to invade other Balkan States. Its full requirements can be covered by Rumanian oil production.

As for the shipment of American and Mexican oil through Vladivostok, its quantity remains one of the major factors which will determine the outcome and duration of the war. Towards the end of 1940 a large quantity of American oil is believed to have been bought by the Soviet Government, and considering that the Soviet Union is self-sufficient regarding oil production, the chances are that this oil was purchased on German account. How far the Trans-Siberian Railway will be able to cope with such a quantity in addition to large quantities of soya beans, wheat, cotton, etc., remains to be seen. Since, however, oil is on the top of the priority list, it is to be feared that in the absence of adequate measures either on the part of Soviet Russia or on the part of the United States and Mexico, a very large part of Germany's oil requirements will continue to be satisfied via Vladivostok. Very little is to be hoped for through an agreement with Russia to stop the traffic. The main guiding principle of the foreign policy of the Soviet Union is to avoid a war with Germany at all costs until Germany has been weakened considerably by Great Britain. Meanwhile Moscow seeks to appease Berlin by supplying Germany with the essential materials she requires, either out of Russian production or through placing the Trans-Siberian Railway at Germany's disposal. On the other hand, it is conceivable that the wish of the United States Administration and pressure of American opinion will sooner or later induce the oil companies to stop selling oil to the Soviet Union, or that the United States Government

itself will take action to place an embargo on oil exports which are likely to find their way to Germany. As for Mexico, pressure on the part of the United States and pre-emptive purchases would achieve the same result.

All this is, however, a matter for the future. The position at the end of 1940 was that while Germany lost the major part if not the entire gains obtained through the capture of oil stocks in the conquered countries, she probably still possessed fairly substantial stocks. At the same time, however, her producing and refining capacity was reduced to such an extent that, in spite of the import of substantial quantities from Rumania and through Soviet Russia, the German High Command had every reason to be concerned about the oil prospects. For this reason economy continued to be enforced in the use of oil, not only for civilian requirements but also for essential military requirements. This is the only possible explanation of the fact that the initial successes in air raids on various British targets were not adequately followed up. The number of bombers and pilots available would have enabled Germany to continue her large-scale night raids upon Great Britain night after night (weather permitting) and during the whole period between sunset and sunrise. If this was not done it was because the German High Command was anxious to keep down the use of oil, especially during the winter months while arrivals from Rumania and Russia were bound to be affected by the severe cold.

As far as Italy is concerned, her oil position is probably even weaker than that of Germany. This in spite of the heavy import of oil during her period of non-belligerency. Part of the imported oil has been

re-exported to Germany, while a very large part of the quantities retained as a reserve have been used up since Italy's entry into the war. By no means inconsiderable quantities have been destroyed by British air raids on oil storage tanks in Naples, Venice and other ports in Italy and in Libya. Since the Italian aggression on Greece the Albanian oil production is no longer fully accessible to Italy, even though the advancing Greek armies had not reached the oil-fields at the time of writing. Synthetic oil production in Italy is incomparably smaller than in Germany.

Regarding the iron ore position, the acquisition of direct control over Luxembourg and Lorraine and of indirect control over the Swedish output improved Germany's position beyond recognition. For her the problem of iron ore production has now become almost entirely one of transport. She has even an adequate surplus to supply Italy with much-needed iron ore or steel, provided always that the transport facilities are available. While during the first eight months of the war the prevention of Swedish ore shipments from reaching Germany constituted one of the major tasks of the British blockade authorities, after the German victories in Northern and Western Europe the problem ceased to exist.

Nor has Germany any reason to worry about her aluminium supply. On the other hand, copper still remains a problem in spite of increasing possibilities of obtaining large quantities from Yugoslavia and Spain. The production of ferro-alloys on German-controlled territory remains far below Germany's requirements. Norway produces a certain amount of molybdenum, but tungsten is only obtainable in any appreciable quantities outside Europe. In this respect,

however, it would be dangerous to indulge in undue optimism. A comparatively small volume of these and other metals used for the purpose of hardening steel goes a long way. There is nothing to prevent Germany from importing tungsten from China and molybdenum from Mexico or the United States through the intermediary of Soviet Russia. In any case, as a result of the disappearance of the French army and of the capture of huge numbers of heavy guns in the Maginot Line and elsewhere in Western Europe, Germany's requirements for ferro-alloys for the purpose of the manufacturing of guns is now much lower than it was during the first part of the war.

At the end of 1940 the rubber position in Germany was becoming interesting. The synthetic rubber production was considerable but its quality was inferior to that of natural rubber. It was in order to accentuate the shortage in rubber that the Ministry of Economic Warfare requested the Air Ministry towards the end of 1940 to pay special attention to Buna rubber factories.

The acquisition of control over Polish, French and Belgian collieries increased the German-controlled coal production to a considerable degree. At the same time coal requirements also increased. The Scandinavian countries, Holland and France have never been self-sufficient in coal and in the past they depended upon British coal imports. After their conquest it became Germany's task to provide all these countries with coal in order to maintain the necessary industrial activities and transport service. Needless to say, the amount of coal supplied for household requirements was reduced to a minimum and the population of the conquered countries suffered great

hardships during the winter of 1940-1941. The combined coal output of Germany and German-controlled countries would be able to cover a considerable part of the total requirements of German-controlled Europe, including Italy. The main difficulty is, however, one of transport. Before the war Italy and most Continental countries were supplied with coal largely by sea routes. Now they have to be supplied largely by railways. This additional strain on the already overtaxed German and German-controlled railway systems added considerably to Germany's transport problems. This matter was handled in a typically German fashion. Germany's own requirements had of course the first call upon the available coal supplies and transport facilities. If there was anything left over, coal deliveries were made to Italy and to war material industries on German-controlled territories. For the rest, it did not matter from a German point of view whether it was possible to carry out undertakings given to the Governments of various conquered countries before or after their conquest. German coal deliveries to every country are considerably behind schedule. Thanks to the British control of the sea routes, the solution of Italy's coal problem borders on the impossible. Transport conditions would have to change considerably for the better in order to enable Italy to import from Germany all the coal she requires.

The food position in Germany and in Italy is, generally speaking, not nearly as unsatisfactory as we would like it to be. As far as Germany is concerned, she is able to maintain comparatively high rations for the German population, thanks to the plunder of the food supplies and current production of the conquered

countries. The rations allotted to the population of these countries are for the most part substantially below the corresponding rations to Germans. There is reason to believe that Germany's wheat reserve declined considerably below its level of August 1939, owing to the bad harvest throughout Europe in 1940. Nevertheless, the wheat position at the end of 1940 was more favourable than at any time during the last war. Owing to Germany's control over South-Eastern Europe and France and owing to the close economic relations between Germany and Soviet Russia, a wheat shortage is not likely to arise.

One of the outstanding effects of British economic warfare has been the deterioration of the transport system in Germany. Already at the time of the outbreak of the war the German rolling stock and railway material in general was in a neglected state. Hitler was too busy on rearming to find time for replacing railway material. Moreover, it was generally assumed that the newly built excellent roads would largely dispense with the necessity of railways. This transport policy proved to be short-sighted to the extreme, for while Germany was able to produce the fuel for her railways, she largely depended upon imported fuel for the use of her excellent roads. Consequently the roads remained largely unused, while the railways were used constantly to the limit of their capacity.

We saw above that the British control of the sea route for coal transport from Germany to Italy put an additional strain upon German railways, which were called upon to carry about a million tons of coal per month across the Brenner or Switzerland. The cessation of Rumanian oil transport by sea also increased the strain on the German railway system.

Ever since the beginning of the active aerial warfare the R.A.F. paid special attention to the German transport system. Railway junctions and marshalling yards were visited systematically and large quantities of railway material were destroyed. At the same time the temporary interruption of traffic at various points increased the strain on alternative routes and accentuated the congestion. A similar result was achieved through the successful bombing of the Dortmund-Ems Canal and other vital inland waterways. The extent to which the extensive German system of canals and rivers were able to relieve the railway system became considerably reduced as a result of air attacks.

Having said all this it is necessary once more to warn against wishful thinking regarding the position of the German transport system. The significance of reports about the experience of travellers who took twelve days to reach Basle from Berlin, or who had to change thirty-two times between Hamburg and the Hungarian frontier, must be viewed in the light of the fact that, in Germany, military transport requirements have an absolute priority over civilian requirements of any kind. The highly unsatisfactory state of passenger traffic does not mean that the German system is on the verge of a complete breakdown. It only means that, after the full satisfaction of military requirements, the margin available for civilian requirements is very small. In any case, unless and until Germany is faced once more with the necessity of fighting a large army on the Continent and of moving a really large number of divisions from one battle-front to another, the present railway facilities available should be sufficient to meet her military requirements.

There is no justification for believing that at the end of 1940 the German economic situation was in any sense catastrophical or even threatened to become so in the relatively near future. Nevertheless, the results of the British economic offensive upon Germany's economic situation were by no means negligible. The long-range outlook appeared to be particularly hopeful regarding oil and railway transport.

CHAPTER X

THE ECONOMIC OFFENSIVE AGAINST ITALY

HITHERTO we have largely confined ourselves to examining British offensive economic warfare against Germany with only occasional references to Italy. Let us now cast a glance upon the methods and results of British economic warfare directed against the junior partner in the Axis.

The methods employed were largely identical with those used against Germany. From the moment Italy became a belligerent the naval blockade on Italian imports and exports was applied against her. It is a pity that the blockade was not introduced much earlier. The argument that Italy would have joined Germany as a result of the application of the blockade against her, and of the rationing of her imports while she was still non-belligerent, does not carry conviction. Italy only joined Germany when she was convinced that the war would be over within a few weeks. Had she been prevented from building up a large oil reserve during her period of non-belligerency, she might have hesitated to enter the war even at that stage.

The weak attitude of the Allies towards Italy enabled her to import substantial quantities of essential materials, even during the last few weeks of her non-belligerency. Although from the time of the German successes in Norway it was obvious that Italy's entry into the war was a mere question of weeks, the Allies allowed her to rush through the contraband

control large quantities of oil, explosives and essential foodstuffs. Even at the beginning of June 1940, when Italy's intervention was obviously a matter of days, the French Government induced the British Government to reverse its decision to hold up certain Italian cargoes at Gibraltar. It was not until a day or two before the actual declaration of war that the Ministry of Economic Warfare took its courage in both hands and stopped some cargoes of Italian high explosives. This decision was not reached without hesitation and objections, but it was eventually decided that the worst that could happen was that the Prize Court would rule that the seizure of the cargoes was wrongful. One of the senior officials of the Ministry expressed his concern about the possibility of severe comments by the Prize Court Judge, but eventually it was decided to take that risk.

After the outbreak of the war with Italy the Mediterranean Fleet had to assume the arduous task of enforcing contraband control against her. This task was of course facilitated by the British control over the Straits of Gibraltar and over the Suez Canal. The problem was largely one of stopping Italian sea-borne traffic on the Mediterranean. Until the entry of Greece into the war the Royal Navy was unable to exercise control over the Adriatic and control over the Aegean Sea was also far from watertight. Nor was it always possible to prevent blockade-running between Spain and Italy, and especially between unoccupied France and Italy. The British naval power had to be concentrated upon the task of preventing the shipment of reinforcements and war material to Libya. This task was enforced on the whole effectively, and the victory of the Imperial

Army of the Nile in December 1940 was largely due to the efficiency of naval control between Libya and Italy. These activities of the Royal Navy come, however, in the military sphere rather than in the sphere of economic warfare. On the other hand, the prevention of oil supplies from reaching Libya and Italian East Africa and the destruction of such supplies by air attacks are on the borderland between military and economic warfare.

We saw in the last chapter that the British control of the seas forced Italy to divert her coal imports from the sea route to the much more difficult land route. Delays in German coal deliveries were from time to time responsible for stoppages in vital Italian industries.

After the entry of Greece into the war British and Greek naval forces effectively interfered from time to time with Italian shipments on the Adriatic, while the Italian bases on the Dodecanese Islands became completely isolated. These bases became reduced to inactivity as a result of their lack of oil reserves due to the naval blockade and to destruction by air attack. Italy no longer received oil consignments from Syria because after the defection of France the Syrian branch of the pipe-line of the Mosul oilfields was cut. Until Italy's entry into the war she received large quantities of Rumanian oil by sea. As a result of the British naval blockade this oil had to be transported henceforth by land, which was by no means easy, for the tanker facilities of the Rumanian State Railways had to be reserved for Germany.

Needless to say, the blockade covered also Italy's exports, though in this respect, as in respect of German exports, there were many loopholes. Italian manufactures were exported through Switzerland, Spain

and Portugal. The Italian air transport undertaking "Lancia" carried to Latin America cargoes which were of small volume in proportion to their value. Regarding Italian imports, too, there were possibilities of evading the blockade, especially through Spain. On the other hand, the gigantic loophole of the Trans-Siberian line, which was so extremely useful for Germany, was not available for the benefit of Italian imports or exports to any appreciable extent. In this respect as in so many other respects, Germany was selfish in relation to her junior partner and only relinquished a small proportion of her share in the use of the facilities of the Trans-Siberian Railway.

Germany's selfishness also manifested itself in the acquisition of practically the entire exportable surplus of countries in Southern and South-Eastern Europe. Italy had very little chance of compensating herself for her lost overseas sources of raw material and food by increasing her purchases in Spain, Portugal, Hungary, Yugoslavia, Rumania or Bulgaria. The German official buyers were first in the field and, in any case, German political pressure prevailed. It is only here and there that Italy was allowed to pick up a few crumbs left over by the Nazi locusts. As for the conquered countries, they were, of course, Germany's exclusive preserves. Their trade with Italy was reduced to a fraction of its volume before the conquest. It seems, therefore, that Italy's economic war potential was affected by Germany's selfish attitude to almost the same extent as by British economic warfare. Without much exaggeration it is possible to say that Italy was subject to blockade by sea on the part of Great Britain and by land on the part of Germany.

At the end of 1940 Italy's economic position was in many respects worse than that of Germany, notwithstanding the fact that Italy entered the war towards the middle of that year after nearly a year of profitable neutrality. Her supplies of oil and coal were much more inadequate than those of Germany, especially after the ill-fated attempt to invade Greece. Towards the end of 1940 the R.A.F. embarked upon attacks upon Italy's oil storage tanks, which until then escaped attacks almost completely. The production and transport of oil in Albania was also heavily interfered with by the Italo-Greek hostilities and R.A.F. attacks, while the oil requirements of the Albanian campaign were considerable. Italy's supplies of metals were also incomparably less adequate than those of Germany. In particular she depended upon Germany for her iron ore. Nor was Italy able to live on the looted food supplies of conquered countries. As, however, she is more self-sufficient than Germany, her food position remained tolerable.

Relatively speaking, the effect of British economic warfare upon Italy by the end of 1940 in many spheres was more pronounced than upon Germany. It affected the Italian raw material position to a higher degree, partly because Italy is more vulnerable in that respect, and partly because of Germany's selfish attitude towards her ally. On the other hand, the Italian transport system was not affected to the same extent as the German, partly because it was not in such a neglected state as the German State Railways at the time Italy entered into the war. The main problem of the Italian transport system is, of course, lack of coal and oil, which is due to the British naval blockade. No attempt was made by the R.A.F. to

attack Italian transport, railways and means of communication systematically, though the bombing of some important railway stations must have affected the efficiency of the railways.

Regarding the prospects, it seems safe to say that Italy's economic war potential is likely to be affected decisively much sooner than Germany's economic war potential. This is the officially declared view of Dr. Dalton, Minister of Economic Warfare. It seems probable that in the course of 1941 Italy will become dependent to an increasing degree upon Germany's support, not only in the military sphere but also in the economic sphere.

CHAPTER XI

THE GERMAN ATTEMPT AT BLOCKADING GREAT BRITAIN

HITHERTO we have been dealing with offensive economic warfare by Great Britain against Germany and Italy. In this chapter and the following chapters we shall be dealing with British defensive economic warfare in face of the German-Italian offensive economic warfare. The relative importance of economic warfare among the weapons with which Germany hopes to defeat and destroy Great Britain and the British Empire is considerable. Nevertheless, the Nazi Government's hopes of victory are built largely upon the very real superiority of the Armies of the Axis Powers, and upon the numerical superiority of the Axis Air Forces over the corresponding defence forces of Great Britain. While Hitler is doing his utmost to weaken Great Britain by means of economic offensive, he hopes to achieve victory by the superior numbers and equipments of his legions.

The aim of British economic offensive is mainly to bring about an exhaustion of Germany's oil supplies and her supplies of certain essential raw materials, and thereby to reduce the striking power and defensive power of the German armed forces. The reduction of Germany's food supplies is merely a secondary aim. German economic offensive, on the other hand, aims at starving the British Isles into submission by means of blockade and other methods of economic warfare, and also at the weakening of the striking power and

defensive power of the British armed forces through depriving them of essential supplies of raw materials.

From the very first day of the war Germany sought to enforce a blockade against Great Britain. Her submarines were, in fact, in position even before war was launched out against Poland. Since Hitler knew the exact date when war would break out, he was able to make all the arrangements for submarines to be despatched along the principal sea routes to and from the British Isles. Consequently, the early results of German submarine warfare were somewhat alarming. While during the last war it was not until 1915 that Germany embarked upon unrestricted submarine warfare, this time she did so from the very beginning. Another difference between the German attack against British sea-borne trade in this war and the last is that this time submarine warfare was supplemented by effective air attacks on British shipping. During the early phases of the war these attacks were concentrated mainly upon the North Sea, as it was not easy for German aircraft operating from German bases to cover the Atlantic sea routes.

A feature of the German submarine warfare was the sinking of a large percentage of neutral ships. The United States, in order to avoid being involved in the conflict, stopped American ships from sailing to ports of the European war zone. On the other hand, a number of Scandinavian, Dutch, Belgian and even Japanese and Italian ships fell victims of the unrestricted submarine warfare.

The Admiralty, under the able leadership of Mr. Winston Churchill, was not slow in taking measures to cope with the situation. Convoys were speedily

organised, and the percentage of ships sunk while in convoy was reduced to a negligible figure. A large number of submarines were destroyed, and after a while Germany considered it advisable to relax the submarine warfare in order to avoid suffering further losses.

In addition to the use of submarines and bomber planes, Germany also sought to enforce her blockade on British sea-borne trade by means of mine-laying. In this respect the world had the occasion for the first time in November 1939 to make the acquaintance of one of Hitler's much-advertised "secret weapons", in the form of the magnetic mine. The initial effect of this weapon was alarming, but it did not take long for the experts of the Admiralty to devise methods of dealing with these mines, and in a short time this menace, like that of the submarine warfare, was reduced to negligible proportions.

Yet another method in the German attempt at blockade was the use of commerce raiders. These raiders inflicted at first fairly heavy losses in distant seas upon British and neutral shipping. When, however, in December 1939, the *Admiral Graf Spee* scuttled itself after the battle of the River Plate, this experience discouraged the German High Command from pursuing this method of warfare, and it was not until the second half of 1940 that the commerce raider reappeared once more.

All these formidable efforts of German economic warfare aiming at preventing supplies from reaching the British Isles produced little perceptible effect upon Great Britain's economic war potential. Although in themselves the figures of shipping losses were considerable, they represented a moderate percentage

both of the shipping tonnage and of the volume of goods that continued to arrive in British ports. The German efforts were unable to affect to any perceptible degree the food position or the raw material position. This was due in part to the accumulation of substantial reserves in wheat, sugar, whale oil and other essential materials. These reserves might have been considerably larger had it not been for the short-sightedness of the Treasury, which was reluctant to authorise the spending of really large amounts for that purpose before the war. The supplies of metals and other raw materials became perceptibly reduced during the weeks that preceded the war, as a result of heavy German buying which was not checked in time. Nevertheless, even though the Government's pre-war policy in this respect is open to criticism, it must be admitted that the steps it took, inadequate as they were, went a long way towards safeguarding the British food and raw material position against the effects of German blockade. There were, however, several noteworthy omissions in the British measures. The Government failed to make adequate provisions before the war regarding reserves in feeding stuffs and timber. Both these articles are very bulky and require much shipping space. As far as timber is concerned, the bulk of the pre-war imports came from the Scandinavian and Baltic ports, which were either cut off completely from Great Britain or at any rate were within easy range of the German submarines operating in the North Sea.

During the early phases of the war there was no sign of shortage in food supplies in general. If, in spite of this, certain essential foodstuffs were rationed at an early stage, this was due not so much to the

German submarine warfare as to the desire to economise in foreign exchange. It was not until late in 1940 that German economic warfare began to affect the British food position.

During the early phases of the war German pre-emptive purchases were noticed in Spain, where German trade organisations working with huge staffs remained active, in spite of the fact that in theory at any rate the naval blockade cut off Germany from Spain. In China and in various overseas countries German buyers were competing for ferro-alloys and other essential materials.

The result of the German campaign in Northern and Western Europe during the spring and summer of 1940 brought about far-reaching changes in the situation. The German claim of Continental blockade, which until then was considered to be outside the realm of practical politics, became reality to a large extent from the middle of 1940. British trade with countries under German occupation ceased as a matter of course. Trade with Switzerland, Sweden, Finland and even Soviet Russia became reduced to negligible proportions. The defection of France and Italy's entry into the war made it necessary to discontinue the Mediterranean trade route and, consequently, it became all but impracticable to carry on trade on a large scale with the Balkans or with Hungary. In any case, after the German victories Hungary, Rumania and, to a less extent, Yugoslavia came under strong German influence and were hardly in a position to continue trading with Great Britain.

After the German armed forces installed themselves in the ports of Norway, Denmark, Holland, Belgium and France, Germany embarked once more upon

submarine warfare on a large scale. This time her position was incomparably more favourable. In possession of a number of new bases in the North Sea, the English Channel and the Atlantic, she was able to operate within a much wider range and much more effectively. The submarine warfare was supported and supplemented by air attacks on British shipping on a much larger scale than during the early phases of the war. Commerce raiders, too, made their appearance during the autumn of 1940.

To the German naval and air forces employed against British shipping were added the Italian submarines and bombers. The former operated at first mainly in the Mediterranean, but subsequently they established close collaboration with the German Submarine Command and extended their operations over the Atlantic.

Simultaneously with the increased intensity of Axis warfare against British shipping, the British defensive measures against that warfare inevitably weakened through the defection of France and through the necessity of increasing the British naval and air forces operating in the Mediterranean. In the circumstances it was not surprising that during the autumn and winter of 1940 the British shipping losses increased to an alarming degree. Even though the purchase of fifty American destroyers brought some relief, the situation gave cause nevertheless to grave concern. The almost complete loss of Great Britain's Continental trade aggravated the British shipping position to no slight extent. A large percentage of the food and raw material imports, which until then were shipped from the Continent, had to be shipped henceforth from much more distant countries. The loss of the Mediterranean

route necessitated the use of much longer sea routes, and the increased activities of German and Italian submarines, bombers and commerce raiders compelled convoys to pursue devious routes. All this made for delay and tended to aggravate the shipping position.

Thus in addition to the considerable volume of losses in imported materials through sinkings, the British food and raw material position became adversely affected also through the slowing-down of the arrival of those consignments which escaped the enemy attacks. The shipping position was considered to be very grave indeed, for the bulk of the losses occurred in medium-sized freighters suitable for trans-Atlantic transport. Fortunately a large proportion of the merchant fleets of the conquered countries was placed at the disposal of the British authorities, and this constituted a considerable item, especially in the case of Norway and Holland. The Government made considerable efforts to build, buy or charter additional tonnage, in order to counteract the effects of the sinkings.

Notwithstanding these measures it was inevitable that Great Britain's supplies of food and raw materials should suffer, especially as a large and increasing percentage of British tonnage had to be earmarked for the transport of American war materials in ever-growing quantities, and a by no means inconsiderable number of ships had to be used for the reinforcement and supply of the Imperial Army in the Middle East. During the autumn and winter of 1940 shortages became apparent in many directions. It became necessary to discontinue the import of various kinds of foodstuffs. Regarding raw materials, the increased war effort since the change of Government in May 1940

made heavy inroads in the available supplies, and their replacement was becoming increasingly important.

Nevertheless, it must be said that at the end of 1940 the results of the German naval and air attacks upon the British food and raw material position were not such as to give cause to anxiety regarding the immediate prospects. It is true, rations had to be reduced and the food supplies at the disposal of housewives became incomparably less varied than they were a few months earlier. There were from time to time acute shortages in various types of food, but this only meant that the consumers had to be satisfied with some alternative kinds of food. There was never a shortage in the sense that the population had to go hungry. Nor, generally speaking, was the nutrition value of the food that was available inadequate. While the problems of catering for households became more difficult and the fares less varied, the state of affairs was far from intolerable.

Regarding raw materials, too, the immediate position at the end of 1940 was, generally speaking, not unsatisfactory. In spite of huge oil requirements for the Navy and Air Force, there were ample oil supplies available also for industrial and private purposes. Although from time to time there were shortages in certain raw materials, generally speaking it is true to say that these shortages were hardly ever sufficiently acute to bring about a stoppage in the activities of essential war industries, or even to slow down their pace. We are justified in saying, therefore, that until the end of 1940 at any rate, the German efforts directed against British shipping were unable to influence Great Britain's economic war effort to any considerable extent.

CHAPTER XII

ECONOMIC EFFECTS OF THE GERMAN AIR OFFENSIVE

UNTIL the summer of 1940 German economic warfare against Great Britain was confined largely to an attempt to blockade the British Isles. From August 1940 onwards the weapon of blockade was supplemented by that of air warfare. Simultaneously with the intensification of the submarine campaign and air attacks on British, Allied and neutral ships, the German High Command sought to reduce Great Britain's economic war potential by means of the wholesale destruction of Great Britain's essential supplies, means of production and port facilities.

The relative extent to which air raids served the purposes of economic warfare was, in the case of Germany, incomparably smaller than in the case of Great Britain. We saw in Chapter VIII that the British air offensive against Germany was largely directed against oil supplies and other targets of economic importance from the point of view of Germany's war effort. The same cannot be said to be true concerning the German air offensive against Great Britain. It is possible to discriminate between several phases in that air offensive. Until the end of August it barely exceeded the limits of nuisance raids calculated to disturb the normal life of the British people without being able to deal any heavy blows upon Great Britain. Such nuisance raids interfered to some extent with production, in that the practice of

taking shelter during the periods of alerts led to loss of valuable working hours. The extent of destruction of life and property in general and of economic war potential in particular was however, generally speaking, negligible during that first phase.

The second phase was characterised by intensified air attacks on London. The mass daylight attacks in August and again in September served mainly a military purpose. They aimed at establishing German superiority in the air over Great Britain. At the same time, however, an attempt was made to destroy the vital services of London and thereby to paralyse life in the Metropolis. To some extent this attempt served undoubtedly the purpose of economic warfare, for Greater London plays a by no means inconsiderable part in Great Britain's economic war effort. The main object was, however, to prepare for an invasion by disorganising the central administration in London and by diverting the Government's main attention upon the problem of London's protection. By the middle of September it became obvious that the German High Command had failed to achieve this object and that it was necessary to adjourn indefinitely the projected invasion. From that time onwards the systematic air attacks on London, mostly by night, served the main purpose of undermining the morale of the Londoners and inducing them to bring pressure to bear upon the Government to end the war. For that purpose systematic attacks on London's main services, arteries of communication and residential districts were continued throughout September and October.

Although all these air attacks were not meant to serve primarily the purposes of economic warfare,

their secondary effect was to weaken to some extent Great Britain's economic war effort. Strangely enough, the first day of the Blitzkrieg, September 7, wrought more destruction than the cumulative efforts of German air attacks during subsequent weeks. The destruction of a substantial part of the Port of London was admittedly a severe blow, while other industrial property along the Thames Estuary and in the close vicinity of the capital also suffered. In spite of this and the subsequent damage caused to industrial property near London, it is justifiable to claim that the relative extent of the economic effects of the Blitzkrieg up to the middle of November was negligible. Week after week Germany wasted her immense air power upon the futile efforts of reducing London to ruins and undermining the morale of the nation. At the end of ten weeks of concentrated attacks upon the capital only a small fraction of London was destroyed or rendered uninhabitable, and the morale of the Londoners withstood the test remarkably well. The relative extent of damage to London's productive capacity was moderate. While loss of wealth in the form of house property was immense, this loss did not to any extent interfere with Great Britain's economic war effort. Owing to the fact that a large percentage of London's population had been evacuated, it was possible for the remainder to be housed in spite of the wholesale destruction of houses.

Indeed, paradoxical as it may sound, it may be said that the destruction of many thousands of houses added to the resources required for the pursuit of the war, in that it made available large quantities of salvaged materials, especially steel, lead, timber and bricks. Since in the majority of instances the recon-

struction of the destroyed house property was postponed until after the war, the material thus released could be used for the reconstruction of destroyed industrial property. But for the release of materials through the destruction of residential property, the reconstruction of factories and other essential buildings would have constituted a heavy drain upon the limited resources of raw materials.

Deplorable as it is that the German air offensive should cause the loss of many thousands of civilian lives and the destruction of many thousand homes, from the point of view of the British war effort the wanton brutality of indiscriminate German bombing was a blessing in disguise. Had it not been for the short-sightedness of the German High Command, the energy it wasted upon the destruction of property, which, however valuable, is useless from the point of view of the economic war effort, would have been spent upon the destruction of supplies and industrial productive capacity. It was not until the middle of November that this fact was realised in Germany. Conceivably the German High Command itself was aware of it all along, but had to comply with Hitler's instructions. It is a well-known policy of Hitler that the civilian population must be terrorised to the utmost degree, in order that the opponent should be intimidated into surrender. These tactics of mass attacks on the civilian population were successfully applied in the Low Countries and France, and Hitler expected that the result would be the same in Great Britain. It took him several months to realise how utterly futile his efforts were.

From the second half of November the systematic bombing of London abated to a large extent. While

occasionally London was subjected to heavy raids, the main effort of the German air offensive was focussed henceforth upon smaller industrial centres. Coventry was the first victim of the new tactics. The mass attack on Coventry was followed by similar attacks on Birmingham, Southampton, Sheffield, Bristol, Liverpool, Manchester and other industrial centres or seaports. The damage inflicted upon these towns was very considerable indeed. The relative degree of destruction after one or two mass attacks was comparable with that of London after several months of systematic bombing. Nevertheless, even in the case of these attacks the damage was done mainly to residential property and business premises, and not to industrial plant essential to our war effort. In the case of Coventry, for instance, the residential and shopping districts of the town were devastated to an appalling degree, but surprisingly enough the producing capacity of the vital war industries situated there suffered to a relatively moderate extent only. After the recovery from the first shock, a large part of the productive capacity of the Coventry industries was restored almost to the level which it reached prior to the attack. The same is true, more or less, concerning the other cities attacked. While individual factories may have suffered heavily, the total loss inflicted upon the British war industry by the end of 1940, after six weeks of the application of the new tactics, was by no means alarming. Even in the factories which received direct hits the volume of machine tools destroyed beyond repair was in many instances relatively moderate, and this is really what mattered more than anything else. For it is possible to restore the factory buildings within a comparatively

brief space of time, but it takes a long time to replace machine tools which are destroyed. From this point of view it is gratifying to note that by the end of 1940 the number of machine tools registered for war production which suffered damage was rather less than one per cent of the total number registered. What is more, three out of four of these damaged machine tools were repairable.

Similarly, the systematic attacks on the ports of Southern and Western England were unable to affect to a material extent the capacity of those ports. This is particularly significant, for Hitler is known to have built his hopes largely upon the assumption that by making the British ports unusable he would be able to starve Great Britain into surrender, even if the submarine blockade and air raids on ships were unable to produce an adequate result. In fact it is known that in September 1938 at Berchtesgaden Hitler told Mr. Chamberlain that he had no intention to bomb Paris or London, but would smash to pulp all British ports immediately after the outbreak of the war. Sixteen months after the outbreak of the war the British ports were still performing their functions, even though the facilities of some of them were somewhat affected by German air attacks.

It would be idle to deny, however, that the German air offensive against industrial and commercial centres inflicted appreciable losses upon certain branches of production. In some respects these losses were almost irreplaceable in prevailing conditions. It would be inexpedient to give details of these losses, but, deplorable as they were, they did not fundamentally affect Great Britain's economic war potential. They were even unable to prevent the increase of the munition

production during the last quarter of 1940. The effect of the air raids upon the output was more than counteracted by the increase obtained from the new factories which were completed during the period concerned.

The relatively small degree of loss to war industries was due in part to the policy of dispersal pursued by many of the bigger undertakings. Instead of adding new wings to the existing plants, they preferred to establish branch factories in the same district but not in the immediate vicinity of the original plants. A number of idle factory buildings, workshops and garages were converted for that purpose. Moreover, the policy of increasing the number of contractors and sub-contractors also resulted in a high degree of dispersal. By the end of 1940 the leading industrial centres represented a much smaller percentage of the country's total capacity of war material production than they did twelve months ago. Consequently, even if the German concentrated air raids upon these centres had been as successful as the Germans claimed them to be, they would only have destroyed a relatively small percentage of the country's capacity for war material production. As it was, the relative degree of losses inflicted upon British war industries by the air warfare was negligible.

This picture would have been even more satisfactory had it not been for the considerable loss of time as a result of excessive caution in time of air-raid alerts. It was inevitable that, until the population grew accustomed to the feeling of danger, it should be inclined to err on the side of excessive "safety first". The ill-advised system of air-raid warnings was largely responsible for the development of what came to be

termed "shelteritis". Instead of confining the warning to the districts which were directly menaced, it was applied over a vast territory, so that most of the time the industrial districts were under alert while the nearest enemy warplane was scores of miles away.

There were two schools of thought. According to the one, from the point of view of our war effort it is more important to safeguard the life of skilled and trained labour than to maintain the continuity of production. "A dead workman is no good to anyone" was their slogan. But, then, neither is a dead soldier, sailor or airman. And yet if members of the fighting services were to seek shelter at a time when they are supposed to do their duty, the conquest of Great Britain would be a walk-over.

According to the other school of thought, it would be useless to safeguard the life of workmen by keeping them in shelters during the greater part of the working day, if, as a result of the decline in our war production, this country were defeated and enslaved. There was indeed a danger that through exaggerated precautions the output would suffer to a very high degree. It was noted that in towns which actually suffered from mass air raids there was much less inclination to take shelter at the slightest excuse than in towns like Glasgow which remained comparatively immune. By the end of 1940, however, the country was well on its way towards recovery from "shelteritis" and the system by which production is only suspended when the danger is imminent was widely adopted. Even so, it is no exaggeration to say that the output of war industries suffered to a much higher degree through loss of working hours during alerts than through the actual destruction of plants.

CHAPTER XIII

THE ECONOMIC DEFENSIVE

IN the preceding chapters we surveyed the methods and effects of offensive economic warfare. While reference was made now and then to measures taken by this country to counteract these effects, this aspect of the subject has not hitherto been dealt with systematically. Yet defensive economic warfare is as important as offensive economic warfare in influencing the outcome of the war. Great Britain and the Axis States are engaged in a ruthless contest aiming at destroying each other's economic war potential. At the same time, both parties are engaged in a less spectacular but equally vital contest aiming at making good the destruction caused by their opponent. And since it is not the gross relative extent of destruction but its net relative extent that tends to affect the outcome of the struggle, it is essential to take into consideration the extent to which the belligerent countries are able to repair and replace what their opponent has succeeded in destroying.

It is admittedly difficult to draw the line between general economic war efforts and the efforts of defensive economic warfare. Generally speaking, the measures adopted for replacing destroyed supplies or productive capacity are identical with the measures adopted for increasing those very same supplies and productive capacity in the interest of the successful pursuit of the war. Nevertheless, it is possible to give a survey

of the measures which pursue the former end, even though many of them are indistinguishable from general economic war measures.

In this chapter we are particularly concerned with measures of economic defensive aiming at safeguarding essential supplies. These measures may be classed under the following headings :

- (1) Reduction of consumption through rationing.
- (2) Limitation of the production of unessential goods.
- (3) Limitation of building activity.
- (4) Salvage of materials.

The changes brought by the war in the economic conception are incomparably more thorough-going in Great Britain than in Germany or Italy. In the two Axis countries economy with raw materials is by no means a novelty. Both Germany and Italy are largely deficient in essential raw materials, and long before the war they had to resort to various measures of economy. In the case of Germany, the forced pace of rearmament necessitated very far-reaching measures during the last five years that preceded the war to reduce the consumption of raw materials and to obtain a better utilisation of existing supplies and the military utilisation of civilian supplies. Long before the war the iron railings disappeared from the streets, squares and parks of the German cities. The production of civilian goods which necessitated the use of imported raw materials was drastically curtailed. Salvage of household refuse was scientifically organised years before the war. Substitutes for imported raw materials were adopted, not only in the production of civilian goods, but to a large extent also for military purposes. In Italy, too, similar methods made their

appearance during the period of sanctions in 1935-1936, and did not disappear completely even after the sanctions were lifted.

In Great Britain, on the other hand, economy in raw materials is a novelty to those who are not old enough to remember the experience of the last war. Between 1919 and 1939, just as during the century which preceded the last war, the British nation lived in the age of plenty as far as raw materials were concerned. Thanks to the possession of raw-material-producing colonies and of ample foreign exchange resources for the purchase of raw material outside the British Empire, there was never any inducement for economy in imported raw materials. Indeed, owing to the deeply ingrained free trade conception, it was considered an advantage to consume as much imported goods as possible in order to enable raw-material-producing countries to consume the largest possible volume of British manufactures. Even in 1931, when the foreign exchange position became temporarily difficult and a movement developed in favour of a reduction of imports, this movement aimed almost exclusively at the reduction of imported manufactures. Considering that most raw-material-producing countries were debtors to Great Britain, it would have been short-sighted to reduce British purchases of raw materials from them, since in doing so they would have been forced to default upon their debts. Moreover, raw material production within the Empire, and to a considerable extent also outside the Empire, is in the hands of British enterprise and is financed by British capital.

Generally speaking, during the twenty years that elapsed between the two wars, the problem British

experts had to face was not how to reduce consumption in raw materials but how to increase it. The world in general and British-controlled production in particular was suffering from *embarras de richesse*. There was far too much rubber, tin, coffee, copper, etc., and producing interests were at a loss to dispose of the surplus. In the circumstances it would have been considered positively anti-social if someone had initiated a movement to economise in raw materials by collecting used tins or discarded rubber tyres in order that the material should be used again.

The war brought about a fundamental change in the situation. It did not in any way reduce the volume of raw materials produced overseas, but it considerably reduced the volume of foreign exchange and shipping space available for the acquisition of raw materials and their transport to Great Britain. The initial success of German submarine and mine-laying warfare during the first four months of the war should have made it necessary to apply extensive measures of economy in the consumption of food and raw materials. Notwithstanding this, it took a long time for British official opinion and public opinion to realise that Great Britain no longer lived in the age of plenty. The measures which ought to have been adopted from the very beginning of the war were not adopted until later stages, and even then they were not sufficiently far-reaching. It was not until the second year of the war that the necessity for really drastic measures was realised, under the pressure of the revived submarine campaign.

Rationing of some essential foodstuffs was resorted to at a relatively early stage of the war. Butter, sugar, bacon, meat and subsequently margarine, cook-

ing fats and tea were rationed during the course of the first year. The rations fluctuated according to the supplies available. Petrol for civilian purposes was also rationed from the second month of the war. From time to time informal and unofficial rationing of various foodstuffs and other goods was adopted, either at the request of the Government or by the shops, anxious to satisfy all customers by making their limited supplies go round. Official propaganda aimed at persuading the public to keep down its purchases and consumption, though in this respect the official attitude was far from consistent. There were from time to time contradictory statements by members of the Government who were anxious that the taxation capacity of the nation should not suffer through a contraction of the commercial turnover and profits, and by other members who were anxious that the supplies of goods available for civilian consumption should not become exhausted. At the beginning of the war the public was discouraged to accumulate tinned foods and other household supplies beyond one week's requirements. At the beginning of the Blitzkrieg, however, the Government was anxious to disperse the existing stocks and encouraged the accumulation of larger supplies. Subsequently, when shortages developed in various foodstuffs, the Government reverted again to the rule that no one should acquire more than one week's requirements.

From the very outset the Government was urged to extend the application of the system of rationing. The Government was, however, reluctant to follow the German example. From the very beginning Germany applied a very involved and extensive system of rationing of foodstuffs and manufactures for civilian

consumption. The annual amount of textiles, shoes, etc., which any individual was entitled to purchase was fixed under that system. The British Government was not prepared to adopt similar arrangements. It preferred to tackle the problem by limiting the volume of production for civilian purposes. The number of lines covered by the limitation orders issued from time to time by the Board of Trade was, however, comparatively small. The supplies available for home consumption were affected to a much more considerable extent by the Government's policy pursued regarding the allocation of essential raw materials. While raw materials for manufacturers working for export trade enjoyed a priority, it became increasingly difficult to obtain the necessary raw materials for manufacturing civilian goods for home consumption.

The economics of the system of limiting production without at the same time limiting consumption are open to grave objections. The inevitable result of this policy is the depletion of stocks. While the purchasing power of the public increases rapidly as a result of the war expenditure, the volume of current production for civilian requirements tends to decline. Consequently a stage is bound to be reached when the old stocks become entirely exhausted and when current production is unable to meet more than a fraction of the demand. Already in many lines acute shortages developed by the end of 1940. A stage might be reached when the public, after having acquired its rations, will hardly be able to buy anything else. In order to postpone the advent of this stage, it would be advisable to extend the system of rationing as far as this is possible.

The purpose of economy in raw materials is also served by the ban on new building activity. It is characteristic of the slowness with which the necessity of such measures was realised in Whitehall that for a long time official quarters did not attempt to interfere with building activity. The explanation is that during the early months of the war unemployment in building trades increased considerably and the Government was not efficient enough to absorb the hands thus released in essential war work. Rather than expose itself to unpopularity through a rise in unemployment figures, it allowed private initiative to use up much-needed timber, steel, cement and other vital materials for the construction of buildings unconnected with the war effort. It was only with the utmost reluctance that the Government decided that the use of steel for purposes such as the University of London Extension building in Bloomsbury should be discontinued. Yet it would have taken years for that building to be completed, and, in the meantime, steel and other building materials were badly needed for air-raid shelters, coastal defences, aerodromes and other vital purposes connected with the war.

It was equally difficult to induce the Government to take effective action for the collection of essential raw materials held in various forms by the public or wasted day after day. After the German victories of 1940 Great Britain found herself deprived of a very large proportion of her iron ore resources. Her supplies of aluminium and other metals became also inadequate, especially in face of the intensified arms drive. A campaign for the collection of scrap metals and aluminium utensils developed and produced on the whole gratifying results. Nevertheless, all the

resources available were far from having been used. Hundreds of thousands if not millions of tons of iron are still left unused in the form of iron railings round public and private gardens. Anyhow, it is gratifying to know that this very substantial reserve is available in case of further intensification of the submarine blockade.

The collection of household refuse and of waste paper left much to be desired. It took a long time for the authorities to make up their minds to do something, and then they did not do nearly enough. The matter was left in the hands of the local authorities, and the practice varied to a considerable degree from district to district. The permanent officials of the departments concerned did their utmost to resist any effort to induce the Government to take a hand. In accordance with true Civil Service traditions, the experts produced an intimidating array of arguments why household refuse could not and should not be collected. Fortunately about that time a sweeping campaign developed, denouncing the obstructionism of the Civil Service. There was indeed every justification for outspoken criticism of a much-pampered and much-overrated class which, even after the disasters of Flanders and France, failed to realise that a war was on. Rather than assume additional responsibilities which in given circumstances might even interfere with their Saturday golf, permanent officials sought to dissuade inexperienced Ministers from taking any unconventional action. When, however, it was found that many schemes which were declared by the experts to be impossible had been adopted successfully, the Ministers gradually mustered up courage to disregard obstructionist expert opinion. Household refuse and

waste paper began to be collected, even though much valuable material continued to be wasted.

As I already pointed out in Chapter XII, the air raids on London and other cities proved to be the source of additional supplies of much-needed raw materials. Much timber, steel and other metals, bricks, etc., was salvaged from destroyed property and was utilised for war purposes. With the progress of demolition of damaged buildings during the closing months of 1940 this item rose to considerable importance among the resources of raw materials.

CHAPTER XIV

PRODUCTION DURING THE BLITZKRIEG

WE saw in the previous chapter that the requirements of the defence against the German economic offensive against this country resulted in some revolutionary changes in the British economic system in connection with the efforts to maintain essential supplies. It was inevitable that German economic warfare should bring about similar changes also in the sphere of production. Such changes were overdue in any case, apart altogether from the German economic offensive in the form of submarine warfare and air warfare. It should have been obvious from the very outset that the country would be unable to secure the maximum of results from war production under the pre-war system. The necessity for applying a high degree of compulsion upon both capital and labour, in order that war-material production should be increased, was already obvious long before the war. It was one of the great mistakes of which the Chamberlain régime was guilty that it failed to realise this obvious fact. Even if the claim put forward by the apologists of that régime that the Munich surrender was inevitable owing to the inadequate state of British rearmament were acceptable, the absence of any noteworthy efforts to accelerate the pace of rearmament between Munich and the outbreak of the war would remain unpardonable. The idea of creating a Ministry of Supply was resisted to the utmost by Mr. Chamberlain on the ground that

there would be no point in creating such a Ministry unless it had powers of compulsion, powers which can hardly be exercised in time of peace. Although a few weeks before the war a Ministry of Supply was created, it had a very limited sphere of activity.

Even after the outbreak of the war the Government remained for many months utterly reluctant to apply compulsion. On the very first day Parliament granted it emergency powers by which it would have been able to reorganise production in the interests of increasing the war material output. Month after month passed, however, without any sign of such action. There were several reasons for the Government's reluctance to bring about fundamental changes by means of compulsion. First of all, it was believed by the majority of the members of the Government and of the Parliamentary majority supporting it that the war would not be of very long duration and that the Hitler régime would collapse somehow before very long. On the basis of such wishful thinking it is understandable that they should have been reluctant to interfere with the pre-war economic system. They thought it would be a pity to unsettle things, as in doing so they would increase the difficulties of post-war readjustment. The great fault of the Government was, and to some extent still is, that in matters of economic policy it is inclined to think too much in terms of pre-war and post-war requirements, instead of concentrating entirely upon the achievement of a maximum effort to win the war.

The Government was not prepared to apply compulsion either against capital or against labour. War material production was held up to a very large degree owing to the reluctance of industrialists to

expand their plant, for fear that after the war their plants would become a dead asset. They felt that since the hundred per cent Excess Profit Tax deprived them of the means to accumulate an adequate reserve against post-war depreciation, it would be against their interests to invest their capital by means of an expansion of their plant. Nor were they keen on collaborating with the Government, even if the latter was prepared to invest the necessary capital in the construction of new factories. The industrialists wanted guarantees that after the war these factories would not compete with their works. Endless negotiations were conducted on these and similar points, and meanwhile, war material production failed to make adequate progress.

Politically the Government was not in a position to apply compulsion against Labour. The Labour Party was strongly opposed to the Chamberlain Government and any attempt at interfering with Trade Union rights might have led to open industrial conflicts and political strife. The obvious solution would have been to include in the Government at the very beginning of the war the representatives of Labour, as was done in May 1940. Mr. Chamberlain did offer some seats in the Government to the leaders of the Labour Party at the beginning of the war, but evidently his idea was to obtain the collaboration of Labour without any change in his policy. In any case, there could be no question of participation in the Government by Socialists so long as Mr. Chamberlain remained Prime Minister. Consequently Labour remained in opposition, and the Government, in order to avoid antagonising that opposition, abstained from pressing the Trade Unions for concessions, badly as

they were needed in the interests of war material production.

After the change of Government in May 1940, it was hoped that the official attitude towards compulsion in the interest of war material production would change. Indeed, soon after the advent of the Churchill Government with several Labour leaders holding key positions, Parliament passed in record time sweeping legislation which gave the Government unlimited power over the labour and property of all British citizens. "This is not Socialism in our time", remarked a Conservative Member, "it is Socialism in no time." Yet in practice the change was much less revolutionary than it appeared on paper, for the simple reason that the Government was utterly reluctant to make use of its powers of compulsion. Those who believed that the record time in which these powers were passed by Parliament would inspire the executive to introduce swiftly fundamental changes were disappointed. Even those Ministers who meant to make use of their power were obstructed by the citadel of vested interests surrounded by three lines of defence. The first line of defence was the resistance of permanent officials to far-reaching innovations. The second line of defence was the reluctance of Crown Solicitors to draft the necessary orders under the new laws. Even after the Ministers succeeded in overcoming the procrastination of their permanent officials, they found themselves confronted with the task of finding a formula which was acceptable to the lawyers. To be on the safe side, the lawyers insisted that additional legislation would be necessary to make sure that the Orders in Council would not be set aside by the Law Courts. The latter constituted

the third line of defence of the existing order. Generally speaking, judges were inclined to interpret the law in a sense unfavourable to compulsion. In several instances Law Court decisions went against the Government.

Beyond doubt since the change of Government considerable progress has been made towards increasing war material production. The Trade Union rules were relaxed to some extent, and even in the absence of compulsion the Government obtained a considerable degree of voluntary collaboration by employers in the interest of increasing the output. Nevertheless, progress was still far from satisfactory at the time when the situation became aggravated as a result of air attacks and intensified submarine warfare. Under the stimulating influence of the Blitzkrieg, however, all parties concerned made a supreme effort to increase production and to make good the destruction caused by enemy air attacks. Even though the Government made use of its powers of compulsion very sparingly, in the changed circumstances there was more willingness on the part of industrialists to collaborate in the war effort. In possession of the powers of compulsion the Government was in a better position to bring pressure to bear upon the industrialists to induce them to fall in line.

During the summer and autumn months the number of contractors and sub-contractors was increased materially. Government contracts were no longer the privilege of the select few, but everybody who was capable of executing them was given a chance to do so. Considerable efforts were also made to make the best possible use of the machine tools available. Shortage of machine tools constituted one

of the major obstacles to an adequately rapid expansion of munition output. For this reason it was essential to make the best possible use of all machine tools available. Accordingly, the Ministry of Supply carried out a campaign to obtain the voluntary surrender of machine tools by firms engaged in civilian production. It was possible to secure a large number of machine tools without necessarily interfering with the work of their former owners. For instance, most of the large factories have their own repair workshops in which they can carry out the repair and adjustment of their own machinery and equipment. As a rule the capacity of these workshops is well in excess of the requirements of any given moment. By arranging for several factories in the same line of production to pool their resources it was possible to obtain the release of a large number of machine tools for the requirements of munition works, without materially interfering with the requirements of the factories that originally owned them.

The net result of these efforts was the surrender for war material production of several thousands of machine tools. Nevertheless, even better results could have been achieved if the Ministry of Supply had been less hesitant in resorting to compulsion. In several known instances its timidity in making use of its emergency powers was positively detrimental to the war effort. For instance, in one district there was a factory engaged in essential war production which needed certain machine tools badly. In the same district another factory which was idle possessed exactly the machine tools required. Nevertheless, the machine tools remained idle because one of the partners of the undertaking was abroad, while the

other was gravely ill. Here was an instance in which the Government would have had every justification for taking action in order to avoid unnecessary delay in utilising the much-needed machine tools.

The central administration of war material production also left much to be desired. At the beginning of the Blitzkrieg Interdepartmental Committees were established in order to co-ordinate the war efforts of the various Government Departments. The most important amongst them from the point of view of the war material output was the Production Council. At the beginning it consisted of the heads or representatives of the three supply Departments (the Ministry of Supply, the Ministry of Aircraft Production and the Admiralty) and the Ministry of Labour. Subsequently, however, the number of its members grew, and at its last sitting in January Mr. Bevin was delivering an oration to an audience of sixty. Evidently it was impossible to do much work with such an unwieldy Committee and all the real work was done by means of direct negotiations between the heads of Departments. Accordingly, in January the Production Council was converted into a Production Executive and the number of its members was reduced more or less to those who originally participated in the Production Council. Even so, this Interdepartmental Committee was subordinated to another Committee headed by the Lord President of the Council (whose task was "to co-ordinate the co-ordinators"), so that the arrangement was still far from ideal.

While the utilisation of machine-tool resources made fairly good progress, the utilisation of labour continued to leave much to be desired. Even though Trade Unions made concessions, they continued to

adhere to some of the rules which constituted an obstacle to the expansion of war material production. In particular, shifting of labour from one occupation to another was not proceeding satisfactorily. The loss of Continental markets resulted in large-scale unemployment in coal-mining, but, in spite of this, no coal-miners were employed in the task of clearing the debris after air raids, for which work they would have been suitable. Unemployment remained in the vicinity of 750,000 at the end of the year, which, considering the large number of men conscripted for military service, was decidedly excessive.

Admittedly war material production was making progress and the output increased in spite of the destruction and the loss of working hours caused by air raids. The increase could have been much more pronounced had the Government strained every nerve to bring production to the maximum determined by the limits of capacity. However, it is gratifying to register the fact that, inadequate as the economic war effort was, it was more than able to offset the detrimental effect of the Blitzkrieg upon war material production.

CHAPTER XV

FOREIGN TRADE IN THE BLITZKRIEG

THE maintenance of a large volume of foreign trade was a problem of vital importance from the point of view of Great Britain's economic war effort. Great Britain depends upon imports to an even larger extent than Germany. While the self-sufficiency of the latter increased considerably as a result of her conquests and also through the results of her Four-Year Plan, Great Britain's self-sufficiency increased to a relatively moderate extent only, through adjustments in her production and consumption after the outbreak of the war.

Before the war export trade was considered essential, not only as a means for providing the foreign exchange needed for purchases abroad, but also as a means of providing employment at home. This latter aspect of export trade declined considerably in significance as the war proceeded and a shortage of labour developed. On the other hand, the importance of securing much-needed foreign exchange increased materially. Before the war there were ample foreign exchange resources available to meet a series of adverse trade balances. During the course of the war the foreign exchange resources became gradually reduced. Even though Great Britain possessed very large investments abroad, a considerable proportion of them was not readily marketable or their realisation was against the interests of the country. The more the

liquid or easily marketable foreign assets were being used up the more the necessity for making a supreme effort to maintain exports was realised.

Unfortunately, in the matter of export trade the Government "missed the boat" in more than one sense. At the time when shipping facilities were relatively plentiful the Government's efforts to increase export trade were highly inadequate. And by the time these efforts began to become more effective the shipping position had deteriorated to such an extent that export trade was unable to take full advantage of the support received from the Government.

It was inevitable that export trade should suffer a severe set-back at the beginning of the war. During the early months delay was caused by the necessity of organising convoys and by red tape in the Government Departments concerned with the issue of permits. Subsequently praiseworthy efforts were made to remove these obstacles and the delay caused by the inefficiency of administration became gradually reduced. Nevertheless, during the first few months of the war the Government's contribution towards maintaining export trade was purely negative. It largely consisted of the removal of obstacles placed in the way of export trade by Government action.

It was not until the beginning of 1940 that the Government took action in a positive sense to stimulate exports. The Board of Trade took the initiative for the creation of a large number of export groups. The object of these groups was to co-ordinate the efforts of exporters in the same lines and to regulate their relations with Government authorities. In particular, with the aid of these groups it became possible for the Government to allocate raw materials for those engaged

in production for export. On the whole, however, the results produced by the export groups did not come up to expectations. In theory the export groups were supposed to combine the advantages of individual initiative with those of Government intervention. In practice, however, the exporters got the worst of both worlds. They felt that since the Government took the initiative to combine them into groups, it ought to provide guidance for their activities. In reality the guidance provided by the Government was essentially negative. The groups were informed that they could not be allowed to export to certain countries because of the danger of their goods being re-exported to enemy countries, or because the proceeds of their exports would be blocked and Great Britain could make no use of those blocked currencies for purchases. The Government did not, however, help with guidance in a positive sense by telling the exporters to which countries to export and assisting them in case they should experience difficulties in finding markets in the countries concerned. It is true, early in the summer of 1940, the Government envisaged the establishment of depots in overseas countries, in order to secure the continuity of the supply of British manufactures independently of the shipping position. By the time the arrangements reached an advanced stage, however, the shipping position had deteriorated considerably.

The Government expected the merchants to export if necessary without any profit. This is as it should be in time of war. Nevertheless, some provisions ought to have been made to compensate exporters for their efforts and to cover their losses if any. In this respect, too, the Government's attitude was rather negative.

Firms which obtained Government contracts were expected to export irrespective of profit, on the ground that they made all their profit on their Government contracts. In a large number of instances, however, firms working for export trade were not Government contractors.

In the circumstances it was remarkable that export trade should have kept up to the extent to which it did. It was not until the shipping position became really unsatisfactory that the value of exports underwent a sharp fall.

What was even more deplorable than the Government's inadequate efforts to stimulate exports at a time when this was possible, was the delay in exchange control measures aiming at securing for the Treasury the foreign exchange proceeds of exports during the early part of the war. While before the war this country derived advantages from its export trade through the creation of employment, since the outbreak of the war the only purpose for which it remained necessary to export was to secure foreign exchange. Notwithstanding this it took many months for the Treasury to adopt obvious measures in order to prevent the proceeds of exports from being left abroad. The first measures, which were adopted in March 1940, were highly inadequate, and it was not until June 1940 that really effective measures were taken. Even then, part of the proceeds of visible exports and practically the whole proceeds of invisible exports were allowed to remain abroad. Considering that all this time the liquid foreign exchange resources available for purchases abroad were declining rapidly, the Treasury's omission to take effective measures from the very outset to secure the proceeds

of exports was simply unpardonable. It may be said without fear of contradiction that, during the first year of the war at any rate, the inefficiency of the Treasury inflicted incomparably heavier losses upon Great Britain's economic war potential than the economic offensive by Germany. No wonder the foreign exchange departments of the Treasury and the Bank of England came to be nicknamed "Hitler's secret weapon"!

As and when the necessity of forcing exports came to be realised the Government resorted to various unconventional measures. One of the objects of the limitation of supplies for home consumption was to secure an increased surplus for export trade. In this respect, however, the Government overlooked the elementary fact that it was impossible in many lines to produce on a profitable basis if the volume of production was reduced through the limitation of the home market. Needless to say, considerations of profit should not have been allowed to impede the war effort, but since the Government chose to fight this war on the Queensberry rules of individualist capitalism, it might have remembered that in many branches of production export trade cannot exist except as part of large-scale production for an extensive home market. Simultaneously with the reduction of the latter the Government should have made provisions to secure the continuity of the former on a moderately profitable basis.

In theory the elimination of Germany and subsequently Italy as competitors for overseas markets should have facilitated the task of British exporters. In practice, however, it was not so simple for British exporters to secure the place vacated by their rivals

and enemies as a result of the effectiveness of the naval blockade. The requirements satisfied by German and Italian exporters were partly those for cheaper qualities than those produced by British industries. For this reason Japanese exporters were in a better position to supplant many German and Italian exporters. Apart from this, German exporters in particular were much more adaptable than British exporters in producing for special requirements in overseas countries. Generally speaking, the old complaint against British industries and export trade that they expect their overseas customers to adapt their requirements to what happens to be produced in Great Britain still remains true. During the war the adaptation of British production to foreign requirements would have been even more difficult than before the war. Fortunately, owing to the shortage in the supplies of manufactures, which began to develop after the elimination of Continental competitors, many overseas importers had no choice but to buy whatever manufactures were available. Thus at the later stages of the war the lack of adaptability of British export trade was no longer as detrimental to the volume of exports as it was during the earlier stages. Even so, British export trade was unable to increase its sales outside Europe to derive anything like full compensation for the loss of its Continental markets.

British coal exporters were affected to a particularly high degree by the conquest of the countries of Northern and Western Europe and by Italy's entry into the war on Germany's side. While the markets in Latin America and other continents remained still open, any substantial increase of British coal exports to these markets would have necessitated shipping

space which could not easily be spared after the resumption of intensified submarine and air warfare against British shipping. The main trouble is that ships used for the import of meat, wheat or oil cannot be employed for the export of coal, and conversely, ships used for the export of coal cannot be used for the import of most of the bulky commodities purchased abroad.

Shipping space is the major problem also regarding imports. In this respect, as in so many other respects, the Government embarked upon the war without adequate preparations. During the years of the depression a large percentage of British tonnage was laid up and much of it was either allowed to deteriorate or was sold to foreign buyers at a very low price. Consequently the British merchant fleet was far from adequate at the outbreak of the war. Nor did the Government make sufficient efforts to begin with to charter neutral tonnage. It was not until about two months after the outbreak of the war that the Ministry of Shipping was established.

Worst of all, during the depression a number of shipyards were either dismantled or were allowed to fall into disuse. Consequently the shipbuilding capacity of Great Britain was not nearly as large as during the last war. New construction and captured enemy shipping was unable to make up for more than a relatively small percentage of the tonnage destroyed by enemy action. Fortunately, the predominant part of the merchant fleets of countries overrun by Germany managed to escape and was placed in the service of Great Britain. The number of Dutch and Norwegian ships thus secured was particularly important, even though many of them had been chartered to neutral

countries and were not available for British requirements.

The intensified submarine warfare resulted in a heavy decline in the tonnage available for imports during the autumn of 1940. This necessitated drastic reductions in imports in so far as they were not essential for war requirements. Already during the earlier parts of the war there were curtailments of imports, but until the autumn of 1940 the Government did not go far enough in that necessary direction. Instead of making use of all the shipping space available for the import of essential foodstuffs and raw materials in order to increase existing stocks, the Government continued to allot much shipping space for the import of luxuries from overseas. In this respect, too, the Government was guilty of undue leniency towards neutrals and, even more, of reluctance to bring about fundamental changes from pre-war conditions. Had rigid economy in shipping space been enforced from the very first day of the war, the intensified submarine warfare of the autumn of 1940 could have been viewed with comparative equanimity from the point of view of the food and raw-material position. As it was, the Government did not realise the inevitability of drastic measures until the intensified submarine warfare brought about a really substantial decline in the tonnage available. As a result of the shipping losses of the autumn of 1940 it became necessary to cut down or eliminate altogether even some essential food imports.

Lack of adequate shipping space was by no means the only reason for these drastic measures towards the close of 1940. The decline in the foreign exchange reserve made it also necessary to resort to rigid

curtailments of purchases abroad. In this respect, too, the Government had to pay for its predecessor's sins. We saw earlier in this chapter that owing to the laxity of exchange restrictions during the early months of the war much of the proceeds of British exports never found its way to the Treasury. In addition, the maintenance of unnecessarily large luxury imports during the first part of the war resulted in the waste of valuable foreign exchange resources. For instance, many millions of dollars continued to be spent on the import of American films. Encouragement of the production of British films would have obviated the necessity for such waste of dollars. The import of American tobacco was also maintained for some time, even though the big tobacco companies held stocks that covered requirements for years. During the first year of the war large quantities of Japanese toys and silk goods continued to be imported. All these and many other items were really superfluous and it would have been a matter of elementary wisdom to avoid spending foreign exchange upon such imports. On the other hand, it would have been wise to make the maximum of purchases of essential raw materials and of war materials, with the aid of the foreign exchange resources available. While the Treasury was wasteful in failing to prevent the outflow of capital and in authorising the use of foreign exchange resources for the purchase of superfluous goods, it was unduly economical in allocating dollars for the placing of orders for war materials.

It is understood that, as a result of the discussions held in London and Paris during the early months of the war, an agreement was reached between the Treasury and the French Finance Ministry to ration

the dollar reserves for war-material purchases so that they should last out for four years. Consequently the Anglo-French Purchasing Commission in the United States was not allowed to place orders to the capacity of American industries. The short-sightedness of this policy became only too painfully evident through the bitter experience of the summer of 1940, when inferiority in equipment was largely responsible for the collapse of the French army and when lack of small arms exposed Great Britain to the risk of German invasion.

Towards the close of 1940 the liquid or easily realisable foreign exchange assets of the Treasury were beginning to run rather low. This in addition to the need for economy with shipping space was responsible for the drastic curtailment of imports. By the time the reinforcement of exchange restrictions enabled the Treasury to secure for itself the foreign exchange proceeds from British exports, the volume of such exports had also declined materially as a result of the shipping situation. In consequence of the deterioration of the exchange position it became necessary for the British Purchasing Commission virtually to suspend the placing of orders in the United States in December 1940. Fortunately, by that time American opinion was ripe for granting extensive aid to Great Britain. Otherwise the improvidence of the Treasury during the early part of the war might easily have produced fatal results. As it was, it resulted in a temporary suspension in the flow of war material orders.

The reluctance of the Government to depart from pre-war conditions during the early months of the war made it necessary for its successor to depart from pre-

war conditions to a much higher degree than would have been necessary had it not been for the omissions during the early months. In the absence of adequate food imports it became necessary for the public to depart considerably from its customary diet. Even at that stage, however, the fetish of pre-war conception was dying hard. The Government remained reluctant to extend the scope of rationing to enforce really drastic economy in the use of food and raw materials, and to enforce adequately the salvage of waste material. Even though by the end of 1940 the official attitude showed much progress compared with twelve months ago, it still remained much too easy-going in the prevailing grave circumstances.

CHAPTER XVI

FUTURE PROSPECTS

AT the close of 1940 it was hardly possible to form any definite views about the prospects of the deadly contest in which Great Britain and the Axis Powers sought to destroy each other's economic war potential. It was difficult to compare the extent to which German supplies and production were affected by the British blockade with the extent to which German submarine warfare, commerce raiders and air attacks on shipping affected British production and supplies. Both countries had substantial reserves in most of the essential materials, so that at the end of 1940 there appeared to be no likelihood of any paralysing shortages in the immediate future. It would be even more difficult to compare the extent of the relative damages in the two countries caused by air warfare. As we saw in earlier chapters, the German methods of air attacks were largely wasteful from the point of view of their effect upon Great Britain's war production. While the total damage inflicted upon British supplies and productive capacity was possibly larger than that inflicted upon German supplies and productive capacity by the R.A.F., the latter's more systematic attacks on special targets was probably more effective. In no branch of production did the German air attacks cause damage comparable with the damage inflicted upon German oil plants and upon the German transport system.

If it is difficult to compare past results, it is even more difficult to form any opinion about future prospects. There are far too many unknown factors to be considered. In the first instance, it remains to be seen which of the two belligerents will be able to find an answer to night bombing. Both are engaged in experimental research and forecasts of the imminent appearance of the "secret weapon" to deal with night bombers appear too frequently to be taken seriously. Whichever party is more successful in this direction will be at a very considerable advantage over its opponent regarding the destruction of its opponent's economic war potential.

Another unknown factor is the number of bombers which the opponents are in a position to employ for the purpose of economic warfare. If the productive capacity of the aircraft industry were the sole factor in this respect the outlook for Great Britain would be very gloomy indeed. For the chances are that it will take something like eighteen months before the American aircraft industry will be able to deliver a sufficient number of warplanes to balance the difference between British and German aircraft production. Fortunately, the lack of adequate oil resources places a natural limit to the number of planes the Germans can keep in the air. It is therefore possible that long before the combined British-American aircraft production exceeds the numbers of the combined German-Italian aircraft production, the number of British bombers serving the purposes of economic warfare will exceed the corresponding number of German and Italian bombers.

Evidently the prospects of economic warfare depend to a very large degree upon Germany's

capacity to produce and import oil. From this point of view it is to be hoped that in future the R.A.F. will concentrate upon oil targets even to a larger extent than it has done in the past, and that German imports of oil from the United States and various Latin American countries through the intermediary of Soviet Russia will be stopped.

Other things being equal, the chances are that Great Britain will be in a better position to maintain and increase her production of war material than Germany, for the simple reason that while Germany completed the expansion of her plants for the most part before the war, a number of British factories are still under construction. Week after week additional factories are completed and begin to produce, and the German Luftwaffe has its work cut out to destroy enough to make up for this progress. However, Germany's capacity to produce war material is at present infinitely superior to that of Great Britain in most lines, and in itself British production would be unable to make good the difference for many years.

Great Britain has to rely to a very large extent upon the progress of American production to catch up in rearmament with the Axis States. Beyond doubt the potential capacity of American industries is immense. It is superior to the combined capacity of Germany and German-controlled European countries. Raw material resources are inexhaustible and there is a fairly substantial labour reserve to be drawn upon, even though it consists mostly of unskilled labour. Rapid construction has always been the strong point of the United States, and if there is a will there is certainly a way to expand American productive

capacity for war materials in a relatively short time to a very considerable degree.

The question is whether there is a will to do so. American public opinion is all in favour of giving Great Britain the maximum of support short of going to war. The Washington Administration itself is also animated with the utmost goodwill. The question is, will American capital and labour play the game? From this point of view the position at the time of writing is far from being satisfactory. Neither capital nor labour have realised as yet the supreme importance of increasing the war material output irrespective of any sectional considerations. Big Business in the United States is utterly reluctant to invest capital in the expansion of existing plants for the purpose of speeding up war material production. The argument is that the prices paid by the British Purchasing Commission are not sufficiently attractive to make such investment worth while, and that, if and when the United States should enter the war, legislation which is equivalent to the British hundred per cent Excess Profit Tax would become operative. It is feared in consequence that the profit made on deliveries to Great Britain would not allow for the risk of depreciation of plant in case of an early termination of the war.

Moreover, while there are many millions of unemployed in the United States, the industries engaged in war material production have reached practically full employment, especially as far as skilled labour is concerned. This means that, should plants be expanded, an acute shortage of mechanics and other skilled labour would develop. This would materially strengthen the bargaining power of labour in relation

to capital and the latter might be forced to make concessions, such as the acceptance of labour's right to collective bargaining. In Great Britain, where that right has been in existence for a very long time, this attitude of American industrialists may sound strange. Nevertheless, it is a fact which tends to influence unfavourably the chances of an early and substantial increase of war material output in the United States.

The short-sightedness of American business men in face of the menace of Nazi domination is equalled by, the short-sightedness of American labour. Any attempt on the part of employers to obtain an increase of working hours and other changes in working conditions aiming at an increase of the output is resisted with determination. In several instances such attempts have led to strikes in the arms industry.

It must be admitted that, short-sighted as American industrialists and workmen may appear, they are no more so than British industrialists and workmen were during the early months of the war. If the people of a country actually engaged in a war against overwhelming odds take time to realise the necessity of discarding considerations of sectional interests for the sake of a supreme war effort, it is not surprising that a nation which is thousands of miles away from the scene of hostilities should adopt a similar attitude. It is true the Administration has the power to apply compulsion, but the chances are that it will be quite as reluctant as the British Government to make use of this power, at any rate unless and until the United States actually enters the war. So long as the United States remains neutral or even non-belligerent, her effort to become the arsenal of democracy cannot be whole-hearted. Doubtless progress will be made, but

the maximum capacity of war material production will not be approached unless and until the United States becomes a belligerent.

Apart from the problem of increasing production there is also the problem of shipping the war material to Great Britain. While long-range bombers can fly across the Atlantic, all other material requires shipping space and has to be convoyed. The increase of war material output in the United States, Canada, Australia and other overseas countries will further aggravate the shipping problem. Food imports have already been reduced to a minimum and could not be reduced further without causing a depletion of reserves. British essential industries also continue to require the import of raw materials. And since the chances are that for a long time to come sinkings will exceed new construction of ships, the pressure on the declining shipping tonnage will increase with the progress of war material production abroad.

There is no hope for the solution of the problem unless the United States should undertake to give whole-hearted support to Great Britain. Support could assume various forms: The United States shipping lines may temporarily assume various services in the Pacific and with Latin American countries which have hitherto been carried out by British ships. A corresponding tonnage of British shipping would thereby be relieved. The United States could seize the ships of the countries overrun by Germany which are laid up in American harbours. The Washington Administration might be able to persuade the Latin American countries to act likewise. Subsequently German and Italian ships which take refuge in American harbours could be dealt with in the same

way. Finally, American ships could undertake the delivery of some of the goods exported to Great Britain. Regarding the convoying of the ships the United States Navy could render valuable services. The transfer of fifty old destroyers to the British Navy constituted a good beginning in this respect, but much more far-reaching measures are needed to relieve the Royal Navy of the task of convoying all war material consignments across the Atlantic.

It is to be hoped that the Royal Navy and the, R.A.F. will be able to devise more effective methods of defence against the German attacks on British shipping. It does not require undue optimism to hope that traditional British naval superiority will eventually prevail.

However this may be, it is the duty of the Government to do its utmost to enforce economy in productive capacity and supplies. The use of imported materials should be confined entirely to essential military requirements. The salvage of wasted or unused materials should be continued with increasing vigour. The utmost effort should be made to increase food production at home. While official circles are fully aware of the extent of the danger due to the decline of shipping tonnage, the general public is only beginning to take notice. The Government should take the public into its confidence in order to stimulate the drive for economy with imported food and raw materials, for the salvage of waste materials and for the increase of home-grown food production. It is reasonable to expect that during the next twelve months good progress will be achieved in all these directions.

In dealing with the outlook for the next twelve

months it is necessary to envisage the possibility of an invasion. Conceivably the German High Command realises that from a military point of view such an undertaking cannot possibly succeed except quite temporarily, and that such temporary success as it might achieve would be bought at the cost of the eventual destruction of the forces employed. Nevertheless, invasion may be attempted as a weapon of economic warfare. Even if the thousands of parachutists and troops which might be landed by gliders and troop-carrying planes were eventually rounded up, in the meantime they would be capable of inflicting considerable damage to the British production and transport system. And since the number of German and Italian divisions is several times larger than that of the British and Allied divisions, Hitler might conceivably consider it worth his while to sacrifice half a dozen or a dozen divisions in an attempt to disorganise the British economic war effort. It is impossible to foresee the extent of the destruction, but a certain amount of damage from attempted invasions has to be reckoned with.

At the same time, however, there is every reason to hope that the extent to which British offensive economic warfare will affect Germany's economic war potential will materially increase during the next twelve months or so. It is reasonable to hope that the blockade will become increasingly effective. The collaboration of the United States will reduce the flow of essential materials to Germany through the Trans-Siberian Railway, especially if the Washington Administration succeeds in inducing the Latin American Governments also to fall in line with this policy.

What is much more important, the extent of the destruction of supplies, productive capacity and means of transport in Germany through air attacks will increase during the coming year. The striking power of the R.A.F. bomber forces is growing day after day, and once the American aircraft industry has come into its stride this increase will become spectacular and decisive. A stage will be reached — though not necessarily during the next twelve months — when the R.A.F. will have achieved such a degree of superiority over the Luftwaffe that it will be able to afford to engage systematically in mass attacks on German targets by daylight. The extent to which the German Air Force is capable of retaliating will be reduced through the destruction of oil plants.

In the course of time a stage will even be reached when the R.A.F. will be in a position to carry out its task of destruction systematically without encountering any substantial opposition on the part of the German Air Force, just as the latter was able to bomb with impunity Warsaw or Rotterdam. The war will then enter upon its final phase. Germany's military power will be reduced not by means of major battles fought on the Continent — although the final blow will have to assume that form — but by stamping out relentlessly and systematically the essential supplies, means of production and means of transport. Then, and not before, the R.A.F. will be able to afford to embark upon reprisals for the wanton destruction of British cities through indiscriminate bombing by the German Air Force. It is admittedly difficult to restrain the desire to hit back after the frequent German outrages upon British targets of no military significance. In this respect, however, patience will bring its own

reward. The longer the well-deserved reprisals are postponed, the more effective they will be once the hour has struck for them.

Meanwhile it is much more urgent and much more important to concentrate upon oil supplies, transport and the other vulnerable spots of the German system of war economy. No quick decision can be anticipated by this method of economic warfare, but the progress already made in the right direction justifies us to view the prospects with optimism. This war will be won, as the last war was won, largely as a result of economic warfare. While in the last war it assumed mainly the form of reducing Germany's food supplies through the blockade, in this war it will assume mainly the form of reducing her oil supplies through air attacks. Although it is impossible to foresee how long it will take for this novel method of economic warfare to produce decisive results, it is gratifying to know that final victory is merely a question of time. The knowledge of this fact should go a long way to enable the nation to face the prolonged privations inflicted upon it by German offensive economic warfare. What matters is that in the contest of endurance Great Britain will emerge victorious.

THE END

